11-JUN-1999 (first entry)

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This invention describes novel synthetic antigenic peptides (A) based on the human chorionic gonadorropin (hofo beta subunit. These peptides have contraceptive properties and are used for the development of vaccines used to control fertility in aminals and to generate polyclonal antiesta for disaposetic use. The peptides are more specific immunogens than corresponding unmodified peptides are more specific. Itself why do not elicit antibodies that cross-react with human lutelinishing homome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; chortonic gonadotropin; hCG; three-dimensional; 3D; analogue; molecular simulation; visual display; chemical structure; growth factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                      Human chorionic gonadotropin: bota subunit; antigenic peptide: hGG:
contraceptive: vaccine; fertility: polyclonal antisera; diagnostic;
immunogen; human lutednising hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic antigenic peptides from human chorionic gonadotropin beta-subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 99.1%; Score 770; DB 20; Length 145; Best Local Similarity 100.0%; Pred. No. 1.8e-62; Matches 140; Conservative 0; Mismatches 0; Indels Matches 140; Conservative 0; Mismatches 0; Indels
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                                                             Human hCG beta-subunit peptide structure I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Column 19; 80pp; English.
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85US-0804642.
87US-0086401.
92US-0958601.
95US-0467569.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-AUG-1989;
04-DEC-1985;
17-AUG-1987;
06-OCT-1992;
06-JUN-1995;
                                                                                                                                                                                                                                                Homo saptens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This is the wild type human chorionic gonadotropin beta subunit. Mutants comprise at least one electrostatic congregation in a beta comprese at least one electrostatic charge attering mutation in a beta comprese at least one electrostatic charge attering mutation in a beta mitant cystine knot growth factor (EMEP) proteins comprising one or more mutant subunits and having novel properties or improved pharmacological properties, compared to wild type CRGS, are calaned "The CRG superfamily comprises at least four families of growth factors: the diproportein hormones, the platelet efarived growth factor (POEP) family, the new rotrophins and the transforming growth factor. Peet family, the cannot compare the new or to be structurally similar (sepecially comprising the cystine knot topology) and it was shown that mutations at certain post of the CRGP superfamily could significantly similar (sepecially comprising the cystine knot topology) and it was shown that mutations at certain compression of the CRGP superfamily could significantly after the biological cartification and administered to treat or present hypothyrotycolism (claimed). They care also useful; to treat or diagnose thyroid cannot or analogue to stimulate location uptake and exercise subsequently administering the case subsequently administering the case and be administering radiolabeled indine to treat the cancer or enables radiolabel detection (claimed).
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/note- "mutant optionally comprises one or more substitutions in these residues"
                                                                                                                          58..87
/label- beta_hairpin_loop_3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYMA-) UNIV MARYLAND BALTIMORE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Weintraub BD, Szkudlinski MW;
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                                                             Disulfide-bond
Disulfide-bond
Domain
                                                                                                                                                                                                                WO200017360-A1.
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spector-09-813398.pep

Fri Oct 11 17:02:50 2002

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69-8138-3A
PSKEPLRPRCRPINTLAVEKEGCPVCITVNTTICAGYCPTNTRVLGGVLPALPOVVCHYROVRFESIRL
PSKEPLRPRCRPINTLAVEKEGCPVCITVNTTICAGYCPTNTRVLGGVLPALPOVVCHYROVRFESIRL
PGCPRGXNPVVSTAVALSCQCALCRRSTTDCGGRKOHPLTCDDPRRQDSSSSRAPPPSLPSPSRLPGPSD
11

Fri Oct 11 17:02:50 2002

spector-09-813398.pep

; Entered (jdelaval 11-Oct-02 6:53)

09-813398-3C
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXCPPMTRVLGGVLPALPQVCNYBDVRPESIRL
PGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPRFQDSSSSKAPPPSLPSPSILPGPSD
T1

spector-09-813398.pep

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Run on:

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PR0071 rana catesb

909232 acathopagr

84557 cotunix co

931121 morone saxa

99498 trichogaste

84556 meleagris g

P4556 meleagris g

P5482 canis famil

99981 anguilla ja

97123 box taurus

901223 homo saplen

901224 homo saplen

901224 man sacrofa

97397 man glama

P7397 nama glama

P7357 nama glama

P7357 nama glama

P7357 nama glama

P7357 nama glama
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10 CGHB_HUMAN STANDARD; PRT; 165 AA.

11 CHB_HUMAN STANDARD; DATE TO STANDARD; DATE T
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Bukaryota, Wetazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Metazoa; Chordata; Cararrhini; Hominidae; Homo.

NCBL.TaxID-9606;

SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

FIDIGAE S. T. Goodman H.M.;

FIDE CAN The beta-subunit of human chorionic gonadotropin suggests evolution of a gene by readthrough into the 3'-untranslated Nature 286:684-687(1980).
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MEDLINE-8117269; PubMed-7463234;
MEDLINE-8117269; PubMed-7463234;
Birken S., Fetherston J., Canfield R.E., Boime I.;
Birken S., Fetherston J., Canfield R.E., Boime I.;
The amino acid sequences of the prepeptides contained in the alpha and beta subunits of human choriogenadotropin.;
J. Blol. Chem. 256:1816-1823(1981).
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ENGURECE FROM N.A.
HEDLINE-81093590; PubMed-6690982;
Talmadge K., Vamvakopoulos N.C., Fiddes J.C.;
Talmadge K., Vamvakopoulos N.C., Fiddes J.C.;
FVOILE(100 of the genes for the beta subunits of human chorionic gonadotropin and lutelaizing hormone.*;
Nature 307:37-40(1984).
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SECURINE-64008141; PubMed-6194155;
DOLICESTOR P., Ovitt C.E., Hoshina M., Fukuoka H., Boothby M.R., POLICESTOR P., Ovitt C.E., Hoshina M., Fukuoka H., Boothby M.R., Policestor P., Ovitt C.E., Hoshina M., Fukuoka H., Boothby M.R., Puhe beta subunit of human chorionic gonadotropin is encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALIGNMENTS
      RESULT 1
      P01233 homo saplen
P0743 papto anubi
P0743 homo saplen
P1500 callithrix
O4664 equus asiluu
P1979 equus asiluu
P0770 etals silve
P0750 etals silve
P0750 etals silve
P0751 estus norv
P07385 ceratotheri
P01231 ovis arios
P1308 mus misculu
P0942 phodobus su
P1308 mus misculu
P1304 phodobus su
P1308 phodobus su
P1308 phodobus su
P1308 phypophthalm
P1038 concorpynchu
P1035 concorpynchu
                                                                                                                                                         October 11, 2002, 10:56:18; Search time 25 Seconds (without alignments) 218.378 Million cell updates/sec
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1777
PSKEPLRPRCRPINATLAVE.....SKAPPSLPSPSRLPGPSDF 141
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                            GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd
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                                                                                                                                                                                                                                                                                                                                                                                                                            105224 seqs, 38719550 residues
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Maximum Match 100%
Listing first 50 summaries
                                                                                                                      OM protein - protein search, using sw model
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Gapop 10.0 , Gapext.0.5
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Maximum DB seq length: 2000000000
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SQUENCE OF 21-165.
MEDLINE-7231304, PubMed-1150658;
MEDLINE-7231304, Bulken S., Canfield R.E.;
The anino acid sequence of human chorionic gonadotropin. The alpha subunit and beta subunit. ".
J. Blol. Chem. 250:3247-5258(1975).

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21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99.1%; Score 770; DB 1; Length 165;
Ilarity 100.0%; Pred. No. 5.1e-64;
Conservative 0; Hismatches 0; Indels 0; Gaps
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                                                                                                                                                                                                                                                                                             12 N-LINKED (GLCNAC. ..).
7714-C-RO00042.
50 N-LINKED (GLCNAC. ..).
141 O-LINKED.
152 O-LINKED.
158 O-LINKED.
158 O-LINKED.
157 O-LINKED.
157 O-LINKED.
158 O-LINKED.
157 O-LINKED.
158 O-LINKED.
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158 O-ROOOTO
    EMBL; K03183; AAA53287.1; --
EMBL; K00032, AAA53287.1; JOINED.
EMBL; K03182; AAA53287.1; JOINED.
PIF; A01502; KTHBB.
PDB; HCN; 30-SEP-94.
PDB; HKN; 15-KNY-97.
PDB; LWL; 15-KNY-97.
RMM; 118860.
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165 AA;
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Best Local Similarity
Matches 140; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RAY STRUCTURE OF CARBOHYDRATES.

RX MEDILARE-9114469; PubMed-9182020;

RW FSILOR-914469; PubMed-9182020;

RW FSILOR-914469; PubMed-9182020;

RY SILG-specific NY-91900SPJaction of human chorionic gonadorrophin --

RY SILG-specific NY-9190SPJaction of human chorionic gonadorrophin --

RY SILC-91469; PubMed-91820136;

RY ARY CRYSTALOGRAPHY (3.0 ANGSTROMS).

RAY CRYSTALOGRAPHY (3.0 ANGSTROMS).

RY RY CRYSTALOGRAPHY (3.0 ANGSTROMS).

RAY CRYSTALOGRAPHY (3.0 ANGSTROMS).

RAY CRYSTALOGRAPHY (3.0 ANGSTROMS).

RAY CRYSTALOGRAPHY (3.0 ANGSTROMS).

RY CRYSTAL STRUCTURE OF PRECEDING (3.0 ANGSTROMS).

RY CRYSTALOGRAPHY (3.0 ANGSTROMS).

RY CRYSTALOGRAPHY (3.0 ANGSTROMS).

CHAIN WHICH COMPRESS BIOLOGICAL SPECIFICITY TO THYROTROPIN, CONTINGORMY (3.0 ANGSTROMS).

CHAIN WHICH COMPRESS MADE BY THE FIRST TRIMESTER PLACENTN.

-- TISSUE SPECIFICITY: PLACENTY.

-- TISSU
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY ASSIGNMENT OF DISULPIDE BONDS.
HEDDINES-0125630; Pubmed-7240231;
Mise T., Bahl O.,
Assignment of disulfide bonds in the beta subunit of human chorionic genadotropia..;
5. Biol. Chem. 256:6587-6592(1981).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULPIDE BONDS.
MEDILEME-90094415; PubMed-1688430;
SECCULO Beebed J., Mountjoy K., Kresicki R.F., Perini F.,
Ruddon R.M.;
Ruddon R.W.;
"Bole of disulfide bond formation in the folding of human chorionic
gonadotropin beta subunit into an alpha beta dimer assembly-competent
[6]
PRELIMINARY SEQUENCE OF 21-165.
MEDIARE-74011267; PubMed-4795659;
Carlsen R.B., Bahl O.P., Swaminathan N.;
"Human chorionic gonadotropin. Linear amino acid sequence of the beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      - Profasi (Serono)
- Profasi (Serono)
- SIMILARITY: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN FAMILY.
                                                                                                                                                                                                                                                              NEGURINGE OF 1-5 FROM N.A.
REDLINE-86195991, Pubmed-4212163;
Policastro P.F., Daniels-Wequeen S., Carle G., Boime I.;
*A map of the hGG beca-UH beca gene cluster.*;
J. Blol. Chem. 261:5907-5916(1986).
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                                                                                                                                                                                                     Biol. Chem. 248:6810-6827(1973).
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                                                     01-NOV-1995 (Rel. 32, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Lutropin beta chain precursor (Luteinizing hormone beta subunit) (LSH-
beta) (LSH-B).
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MEDITAR=-6662547; PubMed-1191677;
SALTAM M.R., Li C.H.,
"Human pitultary lutropin. Isolation, properties, and the complete adman pitultary lutropin the beta-subunit.":
Blochim. Blophys. Acta 412:70-81(1975).
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STRUCTURE BY NAR OF 58-77,
MEDLINE-92257029,
MEDLINE-92257029, PubMed-1495492;
Kettmann H.T. Hua Q. A., Welss M.A.;
Kettmann H.T. Hua Q. A. Welss M.A.;
Kettmann H.T. Hua Q. A. Exceptor-binding fragment from human luteinizing
hormone beta-subunit determined by [IH]: and [15M]auclear magnetic
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HEDLINES-112208; PubMed-1991473;
HELSSHBAR G., HIVARM J., Renwick A.G.C., Nimtz M.;
*NRR Investigations of the W-linked oligosaccharides at individual
glycosylation sites of human lutropin.*;
Eur. J. Blochem. 195:257-268(1991).
                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (Human).
Manmalla; Eutheria; Primates; Craniata; Vertebrata; Euteleostomi;
Manmalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBL_TaxID-9606;
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MEDLINE-84093590; PubMed-6690982;
MEDLINE-84093590; PubMed-6690982;
MEDLINE-84093590; PubMed-6690982;
"Evolution of the genes for the beta subunits of human chorionic sponadotropin and lutelnizing hormone.";
Nature 307:37-40(1994).
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MEDLINE-7321227; bubled-4719207;
MEDSEC J., Bennen G., Lequin R. M.;
"Human lutelnizing hormone. The amino acid sequence of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             {3}
PRELIMINARY SEQUENCE OF 21-141.
MEDLINE-73090987; PubMed-4685398;
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FEBS Lett. 29:97-100(1973).
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RA MEDLINE-87106851; PubMed-2433190;
RA GIAVIOR R.J., Treger C. 6.4, Mall H.D.;
The nucleotide sequences of baboon chorlonic gonadotropin
The confers The Nucleotide Confers of Conference
Than MICH CONFERS BIOLOGICAL SPECIFICITY TO THYROTROPIN,
THISTOPIN, FOLLTROPIN AND CONADOTROPIN,
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Best Local Similarity 81.4%; Pred. No. 4.3e-51;
Matches 114; Conservative 9; Mismatches 17; Indels 0; Gaps
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LSHB_EQUBU STANDARD; PRT; 169 AA.

AC 046641;
AC 15-DEC-1998 (Rel. 37, Created)
DT 15-DEC-1998 (Rel. 38, Last sequence update)
DT 15-UPDC 1999 (Rel. 38, Last annotation update)
DE Lutropin/chorlogonadotropin beta chain precursor (LSH-B/CG-B)
DE (Lutropin/chorlogonadotropin beta subunit).
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EMEL: S10213 ADD14960.1; ALT_SEQ.

PIR: A01497. UTHUB

EISSP: P01233; IXUL
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10.-CCT-1996 (Rel. 34, Created) .

10.-CCT-1996 (Rel. 34, Last sequence update) .

10.-CCT-2001 (Rel. 40, Last annotation update) .

10.-CCT-20
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HEDLINE-96118019 PubMed-7492691;
Simula A.P. Ameto F., Fasat R., Lopata A., Berka J., Norman R.J.;
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InterPort (PR00130); Cya_CyaKnot.
InterPort (PR00130); Cya_CyaKnot.
InterPort (PR00130); Cya_Knot.
InterPort (PR00130); Cya_Knot.
PRNTS; PR001439; GFCYSKNOT.
PRNTS; PR001439; GFCYSKNOT.
PR0511E; PS00165; CHRYCO_HORMONE_BETA_1; I.
PR0511E; PS001695; GLYCO_HORMONE_BETA_1; I.
HORDOTE; PS001695; GLYCO_HORMONE_BETA_1; I.
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HORDOTE; PS001695; GLYCO_HORMONE_BETA_1; I.
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76 76 MIS
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(Lutenizing hormone beta subunit). LHB.

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57.4%; Pred. No. 7.4e-36;
LLve 16; Mismatches 39; Indels 8; Gaps
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                                                                                                                                   Equus asinus (Donkey).
Makaryota; Hetazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
NCB_Taxin-9793;
                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
Chopineau M., Combarnous Y., Allen W.R., Stewart P.;
Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases.
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Best Local Similarity 57.41
Matches 85; Conservative
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LUTROPIN/CHORIGORADOTROPIN BETA CHAIN.

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TISSUE-PILLIATY:
Chepineau M., Martinat N., Guillou F., Pourchet C.,
Submitted (Ann.1998) to the EMBL/GenBank/DDBJ databases.
- PUNCTION: PROMOTES PERMATOGENEES AND OUTLATION BY STIMULATING
- SUBMITT: HETERODINER OF A COMMON ALPHA CHAIN AND A UNIQUE BETA
CHAIN WHICH COWNERS BIOLOGICAL SPECIFICITY TO THYROTROPIN,
LUTROPIN, FOLLITROPIN AND GONALOTROPIN.
- SIMILARITY: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match 61.3%; Score 476.5; DB 1; Length 169;
Best Local Similarity 62.4%; Pred. No. 4.3e-37;
Matches 88; Conservative 15; Mismatches 33; Indels 5; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Equus burchelli (Plains zebra) (Equus quagga).
Mokaryota; Metazoa; Chordata; Cranlata; Vertebrata; Euteleostomi;
Mommalla; Eutheria; Perissodactyla; Equidae; Equus.
NCBI_TAXID-9790;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-FEB-1991 (Rel. 17, Created)
01-FEB-1992 (Rel. 32, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
Lutropin/choriogonadotropin beta chain precursor (LSH-B/CG-B)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HSSP; PO1233; JXVI.
HSSP; PO1233; JXVI.
InterPro; JRR000359; GP_graknot.
InterPro; JRR0003400; GP_graknot.
InterPro; JRR001345; GJyco_hormone_beta.
PRIMTS: PR0001349; GFCYSKNOT.
PRARTS: SH00068; GHB; I.
PROSITE; PS000681; GLICO_HORMONE_BETA_1; I.
PROSITE; PS000681; GLICO_HORMONE_BETA_2; I.
PROSITE; PS000689; GLICO_HORMONE_BETA_2; I.
PROSITE; PS000689; GLICO_HORMONE_BETA_2; I.
PROFINED GLICO_HORMONE_BETA_3; I.
P
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| 138 SKDPPSQPLTSTSTPTPGASN 158
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LSHB_EQUAS
TD LSHB_EQUAS
AC P19794:
DT 01-FEB-1991
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DE LALTOPLIA/CHO1
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STRUCTURE OF CARBOHYDRATES.
Damm J. B.L., Heard K., Kamerling J.P., van Dedem G.W.K.,
Vilegenthart J.F.C.
Structure determination of the major N- and O-linked carbohydrate
chains of the beta subunit from equine chorionic gonadotropin.;
Eur. J. Biochem. 189:175-183(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 21-169.

BODISIRS-87250/46; PubMed-1298239; , Ward D.N.;
BODISITE-64 G.R., Liu W.-K., Sugino H., Ward D.N.;
BOUSITE-64 G.R., Liu W.-K., Sugino H., Ward D.N.;

"Structural studies on equine 3/ycoprotein hormones. Amino acid
sequence of equine 1 utropin beta-subunit.";

J. Blol. Chem. 262:8610-8620(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 21-169.
MEDIATES-0755 PURMEd=1298238;
MEDIATES-0755 PURMEd=1298238;
SUSITION H. BOUSELEAG G. R., MOORE W.T. Jr., Ward D.N.;
SINITUCHIZAL STUDIES ON Equine 91ycoprotein hormones. Amino acid sequence of equine chorionic gonadorropin beta-subunit.";
J. BIOL. Chem. 262:8603-6609(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-29357055; PubMed-1379674;
Sherman G.B., Wolfe M.W., Parmerle T.A., Clay C.M.,
Threadglil D.S., Sharp D.C., Milson J.H.;
Threadglil D.S., Sharp D.C., Milson J.H.;
A single gene encodes the beta-subunits of equine luteinizing
hormone and chorionic gonadotropin.";
[2]
LGHE HORSE
TD LIGHE HORSE STANDARD; PRT; 169 AA.

AC D0373; P01244;
D1 140G-1980 [Rel. 106, Created)
DT 101-001-1991 [Rel. 106, Last sequence update)
DT 101-001 [Rel. 106, Last sequence update)
DF 1
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PARTIAL SEQUENCE.
**Nation D.N., Moore W.T. Jr., Burleigh B.D.;
**Structural studies on equine chorionic gonadotropin.*;
J. Protein Chem. 1:263-280(1982).
                                                                                                                                                                                                                                                                                                                                    uus.
Equis caballus (Horse).
Rekaryota, Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
KCBI_TRAXID-9796;
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                                                                                                                         CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the Ewen the Swiss Institute of Bioinformatics and the EMBL outstation - the Ewen the Swiss Institute of Bioinformatics and the EMBL outstation - the Ewen the Swiss Institute of Bioinformatics in the Ewen the Swiss Institutions as loss on its use by non-profit institutions as loss of sits content is in no way modified and this statement is not removed. Usage by and for commercial or send an email to incense as loss in the Ewen in Ew
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-027-2001 (Rel. 40, Created)
16-027-2001 (Rel. 40, Last sequence update)
16-027-2001 (Rel. 40, Last annotation update)
Lutropin beta chain precursor (Luteinizing hormone beta subunit) (LSH-beta) (LSH-B) (LH-B).
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                                                                                                                                                                                                                                                                                                                                                                             Felis silvestris catus (Cat).
Mankaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Manmalia, Eutheria, Carnivora, Fissipedia, Felidae, Felis.
NCBL_TaxiD-9665,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (POTENTIAL).
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LOTROPIN BETA CHAIN.

BY SIMILARITY.

WHINED (GLUNAC. . . ) (POTW.

SCOSSODO-9074220B. CRCC44.)
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Matches 77; Conserv
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EMBL: MI0077; AAA30623.1; BRES. MISSO, AAB39267.1; BRES. MISSO, 
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#EDLINE-1405731 PubMed-4770795;
#EDLINE-1405731 PubMed-4770795;
#URCEINITING PORTONES THE PERMATY SETUCTURES Of the beta-subunit from bovine and portcle species. The permaty of permaty is and portcle species.

**ILELE TESTES AND OVARIES TO SYNTHESIZE STREOIDS.

**ILE TESTES TO SYNTHESIZE STREO
                                                                                                                                           EQUENCE FROM N.A.
MEDLINESSA07729; PubMed-2987241;
MEDLINESSA07729; Silver B.J., Thomason A.R., Milson J.H.;
The gene for the beta subunit of bovine luteinizing hormone encodes
a gonadotropin mRMA with an unusually short 5'-untranslated region.';
J. Blol. Chem. 260:7072-7077(1985).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Naurer R.A.;
*Analysis of several bovine lutropin beta subunit cDNAs reveals
*Hetrogeneity in nucleotide sequence.';
7. Blol. Chem. 260:4684-4687(1985).
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BY SIMILARITY.

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                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE-85182575; PubMed-3838746;
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112 P
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15202 MW;
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                                 Bovidae; Bovinae; Bos.
NCBI_TaxID=9913;
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Best Local Similarity
Matches 76; Conserv
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                           modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb.sib.ch/announce/or send an email to license@isb-sib.ch).
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01-JAN-1986 (Rel. 06, Last sequence update)
01-JAN-1986 (Rel. 06, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Lutropin beta chain precursor (Luteinizing hormone beta subunit) (LSH-
LHB.
LHB.
Bos taurus (Bovine).
Bukaryota; Hetzoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutherla; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRPQDSSS 121
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O-LINKED (GALMAC.).
                                                                                                                                                      EMBL, 541704, AMB22775.1;
PIR, A01503; KTHOB
PIR, A03104, A29304,
PIR, A39305, A29305,
RIR, A49117, A41917,
RIS-PP POL233, IMUL.
GLYGOSALLEBB POBP73,
INTERPRO; IRRO02359, Cys. knot.
INTERPRO; IRRO02359, Cys. knot.
INTERPRO; IRRO024595, Cys. knot.
PERSPECT PRO024595, Cys. knot.
PERSPECT PRO02400; Cys. knot.
PERSPECT PRO00155; Cys. knot.
PERSPECT PRO00155; Cys. knot.
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LSHB_BOVIN
LSHB_BOVIN
LSHB_BOVIN
AC P046511;
DT 13-AUG-1987 (Rel
DT 10-CAN-1988 (Rel
DT 10-CAN-1988 (Rel
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MEDIATE-99389233; PubMed-9723860;
MEDIATE-99389233; PubMed-9723860;
MEDIATION OF THE SOUTHER WHITE THINOCEROS (Ceratotherium simum *Ouplication of the Southern white rhinoceros (ceratotherium simum) 3 minum) lutefaintsing hormone beta subunit gene.*;
J. Mol. Endocrinol. 21:19-30(1998).
SEQUENCE OF 7-141 FROW N.A.
                                                                                                                                                                                                                                                                                                21 141 LUTROPIN BETA CHAIN.
43 97 BY SIMILARITY.
44 130 BY SIMILARITY.
54 108 BY SIMILARITY.
58 110 BY SIMILARITY.
58 111 120 BY SIMILARITY.
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Loal Sinlarity 65.5%; Fred. No. 1.88-33; Indels
so 74; Conservative 16; Mismatches 23; Indels
PRINTS; PR00439; GFCYSKNOT.
SHART; SHOONG91 GHB.
PROSITE: PS00261; GLYCO_HORMONE_BETA_1; 1.
PROSITE: PS00669; GLYCO_HORMONE_BETA_2; 1.
HORMONE_S1GRAL; GLYCOPEOLIO.
S1GRAL 1 141 LUTROPIN BETA
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Matches 74
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19 SEQUENCE OF 4-141 FRON N.A.

10 SEQUENCE OF 4-141 FRON N.A.

10 SEQUENCE OF 4-141 FRON N.A.

11 SETAIN-Wister Immainful; ITSSEE-Anterior pituitary;

12 SETAIN-Wister In uncleotide sequences of rat glycoprotein hormone

17 SETAIN-Mister of the fragment. *;

18 SETAIN-Mister of SERMINGTONESTES AND OWLATION BY STIMULATING

18 SERMINGTONESTES SERMINGTONESTES STERMINGTONESTES AND OWLATION BY STIMULATING

18 SERMINGTONESTES SERMINGTONESTES STERMINGTONESTES

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-371-1936 (Rel. 01, Created)
21-371-1936 (Rel. 01, Last sequence update)
16-607-2001 (Rel. 40, Last annotation update)
Lutropin bote chain precursor (Luteinizing hormone beta subunit) (LSH-
becan (LSH-) (HP-8).
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Ratus norvegicus (Rat).
Ratus norvegicus (Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
                                                    **Mucleotide sequence of the cDNA encoding the precursor of the beta submit of rat lutropin."

121

Proc. Natl. Acad. Sci. U.S.A. 80:4649-4653(1983).

122

SEQUENCE FROM N.A.

MEDILEME-8080043; **PubMed-6096374;

"The gene encoding the beta subunit of rat luteinizing hormone."

**Analysis of gene structure and evolution of nucleotide sequence."

**The gene. 29:15474-15480(1984).
                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
STRAIN-SPRAGUE-DAMLEY;
MEDLINE-83273673; PubMed-6192440;
Habbire-8273673; PubMed-6192440;
Habener J.F.; Klein D.R.; Chang A.S.; Tan L.K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT; 141 AA.
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InterPro; IPR000359; Cys.knot.
InterPro; IPR003400; GE_Cysknot.
InterPro; IPR001545; Glyco_Lormone_beta.
Pfam; PP00007; Cys.knot; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
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PRIS. A33322: Urrea a manil to licensedisb-sib.ch).

PRIS. A33323: Urrea a manil to licensedisb-sib.ch).

PRIS. A3
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1D LGSHB_SHEEP

AC POL321.

DT 21-JUL-1996 (Rel. 0), Created)

DT 01-wov-1995 (Rel. 0), Created

DT 01-wov-1995 (Rel. 12), Last sequence update)

DT 16-OCT-2001 (Rel. 40), Last annotation update)

DE Lutropin neta chain precursor (Luteinizing hormone beta subunit) (LSH-DE beta) (LSH-DE (LHB) (Interstitial cell stimulating hormone).

GN LHB.

ON LAST SHEEP

STANDARD

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C
                     bovine and porcine species.";
Eur. J. Biochem. 39,125-523(1973).
Eur. J. Biochem. 39,125-523(1973).
1- FURITION: FROMOTES SPERMATOGEMESIS AND OVULATION BY STIMULATING
THE TESTES AND OVARIES TO SYMTHESIZE STEROLDS.
1- SUBJUIT: HETERODIMEN OF A COMMON ALPHA CHAIN AND A UNIQUE BETA
CHAIN WHICH CONNERS BIOLOGICAL SPECIFICITY TO THROTROPIN,
1- STMILMALTY: BELONGS TO THE GLYCOPROPENIN OF STMILMALTY: BELONGS TO THE GLYCOPROPENIN HORMONES BETA CHAIN
FAMILK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
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BY SINILARITY
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10-307-1930 (Rel. 16, Last asquence update)
16-007-2001 (Rel. 40, Last annotation update)
16-007-2001 (Rel. 40, Last annotation update)
16-007-1001 (Rel. 40, Last annotation update)
16-007-1001 (Rel. 40, Lest annotation)
16-007-1001 (Rel. 40, Lest annotation)
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Maghuin Rogister G., Hennen G.;
"Luteinizing hormone. The primary structures of the beta-subunit from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDILINES-89306142; PubMed-2744222;
KELO IV., HIER-89306142; PubMed-2744222;
"Cloning and DNA Sequence analysis of the CDNA for the precursor of porcline lutefailting hormone (LM) beta subunit.";
MOL. Cell. Endocrinol. 62:47-53(1989).
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** CALCLIE-21063914; Pubmed-1701088;
** Exashi T.. Hirat T., Kato T., Wakabayashi K., Kato Y.;
** The gene for the beta subunit of porcine LH: clusters of GC boxes and CACCC elements.**
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SERVILABITY.

LUTROPIN BETA GRAIN.

BY SIMILARITY.

BY S
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Madkaryota; Metazoa; Chordata; Cranlata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
MCBL_Taxilo=8823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
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INTERFOR TRROBOLOGO GE_CYSKNOT.
INTERFOR TRROBOLOGO GE_CYSKNOT.
INTERFOR TRROBOLS GE_CYSKNOT.
INTERFOR TRROBOLS GE_CYSKNOT.
PRINTS. PRODUJS GECTS.
PROSTTE: PSOOOS6; GLTXCO, HORNONE_BETA_1; 1.
PROSTTE: PSOOOS6; GLTXCO, HORNONE_BETA_1; 1.
HORNONE_SOOOS6; GLTXCO, HORNONE_BETA_2; 1.
STORNONE; SIGNAL GLTXCO, HORNONE_BETA_2; 1.
STORNONE; SIGNAL GLTXCO, HORNONE_BETA_2; 1.
STORNONE_SOOOS6; GLTXCO, HORNONE_SOOOS6; GLTXCO, HORNONE_SO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GLYCO_HORMONE_BETA_1; 1. GLYCO_HORMONE_BETA_2; 1.
send an email to licenseelsb-sib.ch).
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                                                                                                                    EMBL; AF024521; AAC36049.1; -. EMBL; AF024520; AAC36048.1; -.
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14930 MW;
                                                                                                                                                                                                                                  EMBL; U72659; AAB71983.1;
HSSP; P01233; 1XUL.
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92
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75; Conserv
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CONFLICT
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P01232:
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LSHB_PIG
ID LSHB_F
AC P01232
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LSHB_MOUSE STANDARD; PRT; 141 AA.
009108, 060844.
16-007-2001 (Rel. 35, Created)
16-007-2001 (Rel. 40, Last sequence update)
16-007-2001 (Rel. 40, Last annotation update)
Lutroph Deta Alah precursor (Lutefaltzing hormone beta subunit) (LSH-LHS) (LSH-B) (LSH-B) (LH-B).
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SECULAR EXPLANCES BELL A STANDARD AND ACTEDITY;
BROWN P., BROOKS 2., KNORLINY J.R.A. MCHELLIY A.S.F.
SUBMILTED AND AND AND ACTEDITY OF THE PERSEN AND OUNLATION BY STIMULATING
I- RUBUATT: HETERODIARN DE A COMMON ALPHA CHAIN AND A UNIQUE BETA CHAIN WHICH CONTRESS BIOLOGICAL, SPECIFICITY TO THYROTROPIN,
LUTROPIN, FOLLITROPIN AND GONADOTROPIN
-- SIMILARITY: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN
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MEDLINE-96125216; PubMed-8543188;
MEDLINE-96125216; PubMed-8543188;
"Cloning of the mouse gonadotropin beta-subunit-encoding genes, II. Structure of the luteinizing hormone beta-subunit-encoding genes."; Gene 166:3338(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (Mouse).
Rikatyota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostoml;
Mommalia; Eutheria; Rodentia; Sclurognathl; Muridae; Mus.
NCBL_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                BLOCKEN.

N-LINED (GLCNAC. . .).

FYTIA-CAR 200046.

MISSING (IN SOWE HOLECULES).

0 - E (IN REF. 4).

L - P (IN REF. 4).

R -> O (IN REF. 4).

E -> O (IN REF. 4).

E -> O (IN REF. 4).

G -> F (IN REF. 4).

G -> F (IN REF. 4).

G -> F (IN REF. 3 AND 4).

O -> E (IN REF. 3 AND 4).

O -> E (IN REF. 3 AND 4).
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                                                                                                                                                                                                LUTROPIN BETA CHAIN.
BY SIMILARITY.
PEAM: PPO00007; Cya_knot; 1.
PRINCIPE: PRO0586; GFRSTNOT.
PROSTE: PRO0686; GHR.1.
PROSTE: PRO0686; GHR.1.
HOTMONE: SIGNAT, SALVO, HORNONE_BETA_1; 1.
HOTMONE: SIGNAT, 1 141
LOTSULEID 29 77 BY SIGNAL CHANGE BY SIGNAL 29 17 BY SINILARITY.
DISGUELD 49 99 BY SINILARITY.
DISGUELD 54 106 BY SINILARITY.
DISGUELD 54 106 BY SINILARITY.
DISGUELD 58 110 BY SINILARITY.
CHANGE BY 
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Best Local Similarity '64
Matches 75; Conservativ
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30 59
63 71
71 81
122 1
126 1
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SEQUENCE FROM N.A.
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PREN: SS4695; AMB21811: -
EMBL: XS2488; CAN3673911: -
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for the precursor of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 21-139.

WEDLINE-72211145: PubMed-4556309;
Liu W.-K., Wahm H.S., Sweeney C.M., Holcomb G.N., Ward D.N.;
The primary structure of overa lucialisting hormone. II. The amino
end of primary structure of overa lucialisting hormone. II. The amino
encid sequence of the reduced, S.carboxymethylated A.subunit (LH
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mommalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Wolfdae; Caprinae; Ovis.
                                                                                                                                                                              BLOUNE-93517142, PubMed-8149025, M. NCNeIlly A.S., Clark A.J.; Brown P. McNeilly J. R., Walloce R.M., NCNeilly A.S., Clark A.J.; "Characterization of the ovine LH beta-subunit gene: the promotor incres gonadrocrope specific expression in transgenic mice."; Wol. Cell. Endocrinol. 93:137-165(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POURNE OF 21-139. Wheed-4575435; L1 C.H.; Salram M.R., Samy T. S.A., Paphoff H., L1 C.H.; Salram M.R., Samy T.S.A., Paphoff H., L1 C.H.; The perimary structure of owine interstitial cell-stimulating hormone. II. The beta-subunit. Arch. Blochem. Blophys. 153:572-586(1972).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY ASSIGNMENT OF DISULFIDE BONDS.

MEDDIARE-7666B152; PURM-64-1201911;

Chung D., Salram M.R., Li C.H.;

"The primary structure of ovine interstitial cell stimulating hormone. IV: Disulfide bridges of the beta subunit.";

Int. J. Pept. Protein Res. 7:487-493(1975).
                                                                                                                                                                                                                                                                                                                                                                                                 HEDLINE-90245669; PubMed-2316396; Duflaz M., Co
D'Amagle-Denranard G., Moumin M., Jutlaz M., Co
"Cloning and sequence analysis of the CDNA fc
Deta subunit of ovine lutefnizing hormone.";
Nucleic Acids Res. 18:2175-2175(1990).
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PIR: S09232. HSSP. p01231; S09232.
GlycoSuiteDB; P01231; LWU.
GlycoSuiteDB; P01231; C. postnot.
InterPro: IPR0012400; GF_Cysknot.
InterPro: IPR001545; Glyco_hormone_beta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         beta).";
J. Biol. Chem. 247:4365-4381(1972).
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way monofited and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/CHBI; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 200518; 2
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DT 16-CGT-2001 (Rel. 40, Created)

TodorAs;

L6-CGT-2001 (Rel. 40, Last sequence update)

Todor-2010 (Rel. 40, Last sequence update)

TodorAssumption (Rel. 40, Last sequence update)

TodorAssumption (Rel. 40, Last sequence update)

DT 16-CGT-2001 (Rel. 40, Last sequence update)

TodorAssumption (Striped halry-footed hamster)

Eleration (LSB-B) (LH-B) (Eragment).

CC Eleration (Striped halry-footed hamster)

CC Eleration (Striped halry-footed hamster)

CC Eleration (Contains (Striped halry-footed hamster).

CC HAIN WILL (RELIAR (LAST) (LH-B) (LH-B) (LH-B) (LH-B)

RR 1901 (Rel. 1904)

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 54.3%; Score 422; DB 1; Length 138; 1 Similarity 65.5%; Preci No. 3.44-32.
14. Conservative 11; Hismatches 28; Indels 44; Conservative 11; Hismatches 28; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR001359; Cys_knot.
InterPro; IPR001359; Cys_knot.
InterPro; IPR001359; Glyco_hormone_beta.
Pfam: PF00077; Cys_knot; 1.
PR051TE; P800068; GHP: 1.
PR051TE; P800068; GLYCO_HORMONE_BETA_1; 1.
PR051TE; P8000689; GLYCO_HORMONE_BETA_2; 1.
HORMONE_RETA_2; 1.
NOW_TRR 1 1 1
SIGNAL 17
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                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the swiss institute of Bloinformatics and the EMBL outsein on the European Bloinformatics institute. There are no restrictions on its was by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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15.871-190 (Rel. 16, Created)
01-NOV-1990 (Rel. 16, Last sequence update)
16-0CT-2001 (Rel. 16, Last annotation update)
14-0CT-2010 beta chain precursor (Luteinizing hormone beta subunit) (LSH-BLEA) (LH-B) (LH-B) (Fragment).
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MEDLINES-88096605; Pubmed-3697104;
MOLID.L., Appleby V.L., Hjerrild K., Baker A.R., Talmadge K.;
*Nocletic acid and amino acid sequences of dog beta LH: comparison to
rat, cow and human beta LH;
*INCIEC Acids Res. 15:10602-10602(1987).
-I-FUNCTION: PROMOTES SPRANTOGENESIS AND OVULATION BY STIMULATING
-I-SUBUNIT: HFTENDOYERS TO SYMPHESIZE SPRAIDS.
-I-SUBUNIT: HFTENDOYER S BIOLOGICAL SPECIFICITY TO THYROTROPIN,
-I-GUTROPIN. POLLITROPIN AND GONADOTROPIN.
-I-SUMILARATY: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN
FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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Canals familiaris (Dog).

Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammilia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.

NCBL_PaxID-9615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-LINKED (GLCNAC. .) (POTENTIAL)
A -> R (IN REF. 2).
5E997CABF33D90BF CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDP 114
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InterPro: IPR001545; Glyco.hormone_beta.
InterPro: IPR001545; Glyco.hormone_beta.
InterPro: You'ver' I.
SWART: $800066; GBB: 1.
PROSITE; PS00066; GBB: 1.
PROSITE; PS00066; GLYCO.HORWONE_BETA.1: 1.
PROSITE; PS00066; GLYCO.HORWONE_BETA.2: 1.
INTERPOSITE: PS000669; GLYCO.HORWONE_BETA.2: 1.
INTERPOSI
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43 92 BY
54 108 BY
59 110 BY
113 120 BY
33 33 N-1
141 AA, 15028 NW, 5
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EMBL; Y10418; CAA71445.1; -.
HSSP; P01233; IXUL.
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LISHB_CANFA

D 1 10 LISHB_CANFA

D 1 10 NO 11

D 1 NO 1
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64 FASIRLPGCPPGVBPWVSFPVALSCHGGPCRLSSSBGGPGRAZPLACB------RS 113
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56.0%; Pred. No. 7e-31;
tive 18; Mismatches 27; Indels 10; Gaps
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*Lucelining hormone of the sperm whale. Amino acid sequences of

*Lucelining hormone of the sperm whale. Amino acid sequences of

*Lucelining to arboxymethylated beta subbunits.';

Blockhamia 49:1004-1018(1984).

*IR ESTES RAD OVARIES TO SYMPHESIZE STEROIDS.

-I. FURUTION: HETERODIMES OF A COMMON ALPHA CHAIN AND A UNIQUE BETA

CHAIN HILLH CONNERS BIOLOGICAL SPECIFICITY TO THYROTROPIN,

CUTROPIN, FOLLITROPIN AND GONDOTROPIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-4647-1992 (Rel. 12, Created)
16-607-2013 (Rel. 12) Last sequence update)
16-607-2013 (Rel. 16), Last annotation update)
16-607-2013 (Rel. 16), Last annotation update)
16-81-91 (Left B), 18-81 (Leteinizing hormone beta subunit) (LSH-beta)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          yyster catodon (Sperm whale) (Physeter macrocephalus).
Eukaryota: Metacoa: Chordata: Ctanlata: Vertebrata: Euteleostoml;
Hammalia: Eutheria: Cetartiodactyla; Cetacea; Odontocett;
Mysteridae; Physeter.
NCBI_TaxID=9755;
[1]
PUDDENCE.
WEDLINE-6703054: PubMed-3771098;
PRINGY T.A., KEARSYON V.S.;
*Primary structure of sperm whale luteinizing hormone.";
*Primary structure of sperm whale luteinizing hormone.";
Int. J. Pept. Protein Res. 28:124-129(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT; 118 AA.
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HSSP; PO1233; 1XUL.
InterPro; IPR000359; Cys_knot.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 56.09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125 PPPSL 129
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Karasev V.S., Pankov Y.A.;

**Anino acid sequence of reduced and carboxymethylated alpha- and beta-
subunities of the little picked whale luteinizing hormone.*;

**Bickhimit 50:1972-1986(1985).

**INTERIATION: PROMOTES TO SYMTHESIDE STRENDION:

**ITHER PRESONER SPERMATOGENESIS AND OWILATION BY STITULATING

**THE PETERS AND OWALES TO SYMTHESIDE STRENDION:

**ICHARIAN WHICH CONFERS BIOLOGICAL SPETICITY TO THYROTROPIN,

**ICHARDPIN FOLLIRROPIN AND COMMODOTROPIN, ICHARDPIN FOLLIRROPIN AND CHARD AND CHARD STRENDING ST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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01-0CT-1993 (Rel. 27, Last sequence update)
10-0CT-1993 (Rel. 27, Last sequence update)
Lutropin Deta chain (Luteinizing hormone beta subunit) (LSH-beta)
(LSH-B) (LH-B).
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Bikaryota Wetacoa: Clordata: Craquata Vertebrata: Euteleostomi;

Hammalia: Butheria: Cetartiodactyla; Cetacea; Mysticeti;

Balaenopteridae: Balaenoptera.

WGB_Tax.No.9767;
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                                                                                                                                                                                                                                                    EMBL; AF106915; AAF15966.1; -. HSSP; P01233; 1X0L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 52.6%
Best Local Similarity 63.9%
Matches 69; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         128 AA;
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HSSP; P01233; IXUL.
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DISULFID
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NON_TER
SEQUENCE
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Listary STANDARD; PRT; 141 AA.

16-027-2001 (Rel. 40, Created)

16-027-2001 (Rel. 40, Last sequence update)

16-027-2001 (Rel. 40, Last annotation update)

16-027-200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22 PLRPLCRPTNATLAAESDACPVCVTFTTICAGYCPSW/RVLPAALPPSPQLVCTYRELS 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5 PLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVR 64
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TISSUEPFLUITARY,
TISSUEPFLUITARY,
THOUTHE-964524, Pubhed-9680384;
Harrison G.A., Deane E.M., Cooper D.W.;
"COMP A Cloning of lutefulting hormone subunits from brushtail possum and red kangaro.";
Marm. Genome 9:638-642(1998).
                                                                                                                                                                                                                                                                                                                         | 19 | POTENTIAL.
| 19 | LUTROPIN BETA CHAIN.
| 20 | 138 | LUTROPIN BETA CHAIN.
| 1 90 | BY SHILLARITY.
| 1 28 | BY SHILLARITY.
| 22 | 106 | BY SHILLARITY.
| 106 | BY SHILLARITY.
| 107 | BY SHILLARITY.
| 108 | BY SHILLARITY.
| 11 | 118 | BY SHILLARITY.
| 11 | 118 | BY SHILLARITY.
| 11 | 118 | BY SHILLARITY.
| 14699 MH; 24602139306BRATE. (POTENTIAL).
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             HSSP, P01233; IXUL
Interpro; PR000359; Cys_knot.
Interpro; IRR001545; Glyco_hormon_beta.
Fram: PP00007; Cys_knot; 1.
FR051TE; PS00069; GHB; 1.
PR051TE; PS00069; GLYCO_HORMONE_BETA_1; 1.
HORMONE_FR051TE; PS00699; GLYCO_HORMONE_BETA_2; 1.
HORMONE_FR051TE; PS00699; GLYCO_HORMONE_BETA_2; 1.
HORMONE_FR051TE; PS00699; GLYCO_HORMONE_BETA_2; 1.
S1GNAL
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es 69; Conserva
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CARBOHYD
SEQUENCE
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Best Local S
Matches 69;
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16-00T-2001 (Rel. 40, Last amnotation update)
Lutropin beta chain procursor (Luteinizing hormone beta subunit) (LSH-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               52.3%; Score 406; DB 1; Length 118; 57.6%; Pred. No. 8.6e-31; Live 15; Mismatches 28; Indels 10; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 PLRPLCRPINATLAAQNZACPVCITFTTSICAGYCPSMYRVLPAALPPVPZPVCTYRQLR 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5 PLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVR 64
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GENOME 9:688-642(1998).

THE TESTES AND OVULATION BY STIMULATING THE TESTES AND OVULATION BY STIMULATING THE TESTES AND OVULATION BY STIMULATING THE TESTES AND OVULATES TO SYMPHESIZE STEROIDS.

SUBUNIT: HETERODIMER OF A COMMON ALDHA CHAIN AND A UNIQUE BETA CHAIN WHICH COMPERS BIOLOGICAL SPECIFICITY TO THYROPIN, LUTROPIN, FOLLITROPIN AND GONANDOTROPIN.

SIMILARITY: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-PILLIEAY;
HIRSDLINE-PB14624; PubMed-9680184;
Hartison G.A., Deane E.M., Cooper D.W.;
cons. Zioning of luceinizing hormone subunits from brushtail possum and red kangaroc; ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mocropus rufus (Red kangaroo) (Megaleia rufa).
Eukaryota: Metazoa: Chordata; Craniata: Vertebrata; Euteleostomi;
Mammalia: Metatherla; Diprotodontla; Macropodidae: Macropus.
(1)
PRT; 138 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 52.3
Best Local Similarity 57.6
Matches 72; Conservative
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110 13.5HB_MCM
110 13.0 + MARIN
14.0 + MARIN
15.0 + MARIN
15.0
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Gaps

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51.7%; Score 402; DB 1; Length 138; 62.7%; Pred. No. 2.3e-30; ive 11; Mismatches 30; Indels

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EMBL; AF017450; AAC96021.1; -.

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use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement ($6e http://www.isb-sib.ch/announce/or send an email to licenseeisb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OLIVORDOCCEIN.

140 GONADACTROFIN BETA-II CHAIN.

17 BY SIMILARITY.

130 BY SIMILARITY.

130 BY SIMILARITY.

140 BY SIMILARITY.

150 BY SIMILARITY.

170 BY SIMILARITY.

180 BY SIMILARITY.

180 BY SIMILARITY.

180 BY SIMILARITY.

180 BY SIMILARITY.

181 BY SIMILARITY.

181 BY SIMILARITY.

18533 MM. REB663562979ADPR CRC64;
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MEDLINE-0921391 PubMed-1216480;
MEDLINE-0921391 PubMed -12.4. Huang C.-J., Huang C.-J., Huang C.-J., Huang C.-C., Huang C.-C., Huang C.-D., Hu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13.502-1986 (Rel. 01, Created)
01-MAY-1992 (Rel. 22, Last sequence update)
16-C7-2001 (Rel. 40, Last annotation update)
16-C7-2001 (Rel. 10, Last annotation update)
16-C7-2001 beta II chain precursor (GTH-II-beta) (Luteinizing Conadortropin beta II chain precursor (GTH-II-beta) (Luteinizing Diamone-like GTH).
Cyprinus carpio (Common carp).
McHaryota, McLaxoa. Chordata, Craniata; Vertebrata; Euteleostomi; Actinoptery91; Neoptery91; Teleostel; Euteleostei; Ostariophy91; Cgpriniformes, Cyprinidae; Cyprinidae; Cyprinidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF 28-53 AND 141-142.

WEDLINEY-8124081; PUMMC4607993;
JOHLSS J., BUTZARA-GERENG E., FORTELINE Y.-A., JOHLES P.;
"The evolution of gonadotropins: some molecular data concerning a non-mammalian pitulierty qonadotropin, the hormone from a teleost fish (Cyptinus carple L.).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
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Chang Y.S., Huang F.L., LO T.-B.;
Submitted (HAT-1991) to the EMBL/GenBank/DDBJ databases.
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Int. J. Pept. Protein Reg. 32:556-564(1988).
                                                                                                                                                                                                                                                                                                                                                                                             HISTORY FOLLOW.

INTERPOS, IRROGASOS, CYS_KNOT.

INTERPOS, IRROGASOS, GE_CYSKNOT.

INTERPOS, IRROGASOS, GE_CYSKNOT.

PRINTS, PROUNTS, CYS_KNOT.

PRINTS, PROUNTS, GYS_KNOT.

PROSTITE, PROUNTS, GYS_KNOT.

PROSTITE, PROUNTS, GYS_KNOT.

PROSTITE, PROUNTS, GYS_KNOT.

SIGNAL, HOTMONE, GLYCO_HORMONE_BETA_1; 1.

SIGNAL, HOTMONE, GLYCO_HORMONE_BETA_2; 1.

SIGNAL, HOTMONE, GLYCO_HORMONE_BETA_2; 1.
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EMBL; AB015596; BAA86658.1;
HSSP; P01233; IXUL.
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OH12-CPCA
AC CHILL-1986
DT 21-ULL-1986
DT 10-ULL-1986
DT 16-CTT-2001
DE Conadotroph DE Conadotroph OC CALL 1997
CO CALL 1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26 LRPLCRPINATLAAESDACPVCVTFTTICAGYCPSMYRVLPAALPPGPQLVCTYRELSF 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6 LRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRF 65
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16-027-2001 (Rel. 40, Last sequence update)
16-027-2001 (Rel. 40, Last sequence update)
16-027-2001 (Rel. 40, Last annotation update)
16-03-2001 (Relation 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE TO STATE TO STATE
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23 141 LUTROPIN BERTA CHAIN.
30 78 BY SIMILARITY.
41 93 BY SIMILARITY.
47 131 BY SIMILARITY.
55 109 BY SIMILARITY.
56 111 BY SIMILARITY.
57 112 BY SIMILARITY.
58 111 BY SIMILARITY.
58 114 121 BY SIMILARITY.
58 34 N-LINKED (GLCANC...) (POTEWTIAL).
141 AA; 15060 MM; CGCF98036B3C4EE0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-97242865; Pubmed-9073500; MEDLINE-97242865; Pubmed-9073500; Mosblura T., Kobayashi M., Kato X.A. Aida K.; Molecular Cloning of the CDNAs encoding two gonadotropin beta subunits (GTH-I beta and -II beta) from the goldfish, Carassius
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 393; DB 1; Length 141;
Pred. No. 1.6e-29;
1; Mismatches 30; Indels
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                                                                                                                                                                                                                                                                                                                                        Pfan; PF00007; Cyg_knot; J. Layo_lormone_beta.
PARAT; SMO0061; Cyg_knot; J. L.
PROSITE; PS00061; GLXCO_HORMONE_BETA_1; J.
PROSITE; PS00689; GLXCO_HORMONE_BETA_2; J. HORDONE; Stgnal; GLYCO_FOORDONE_BETA_2; J. STGNAD.

22 By SIMILARITY.
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                                                                                                                                                                                                                                                       InterPro: IPR000359; Cys_knot.
TherPro: IPR001545; Glyco_hormone_beta.
Ffam; PF00007; Cys_knot; 1.
SWARR: SW00068; GHB; 1.
or send an email to licenseelsb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11;
                                                                                             EMBL; AF017448; AAC96019.1; -. EMBL; AF090388; AAC63526.1; -.
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098849;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          68;
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Best Local 9
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GTH2_CARAU
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Chang Y.S., Huang C.J., Huang F.-L., Liu C.S., Lo T.-B.;

The Purificacino, characterization, and molecular clounds of purificacino, characterization, and molecular clounds of the purificacino, characterization, and molecular clounds of the gondoctropin subunits of silvar carp (Hypophthalmichthys onlitrix).;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 PRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28 PPCEPVNETVAVEKEGCPKGLVFQTTICSGHCLTKEPVIKSPFSTVYQHVCTYRDVRYET 87
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101-071-1993 (Rel. 26, Created)
101-071-1993 (Rel. 26, Created)
101-071-1993 (Rel. 26, Last sequence update)
10-07-2001 (Rel. 40, Last annotation update)
10-07-1091 (Grament)

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N-LINKED (GLCNAC. .) (POTENTIAL).
W; AA 2C4 BFE938EEA46 CRC64:
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TISSUE-PILLILARY;
TISSUE-PILLILARY;
TOTAIN T.S., Hoang F.-L., LO T.-B.;
SUDMITTER (JUL-1991) to the EMBL/Genank/DDBJ databases.
SUDMITTER (JUL-1991) to GMETOGENESIS AND STEROIDOGENSIS.
-I. EUNCHIN: INVOLVED IN GMETOGENESIS AND STEROIDOGENSIS.
-I. SUBUNIT: HETEROIDERS OF AN LAHRA AND A BETA CHAIN.
-I. SUBUNIT: HETEROIDERS OF AN EUCOPPOTEIN HORMONES BETA CHAIN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GONADOTROPIN BETA-II CHAIN
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38.7%; Score 301; DB
Best Local Similarity 54.3%; Pred. No. 4.4e
Matches 51; Conservative 15; Mismatches
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140 141 BY
30 78 BY
47 131 BY
55 109 BY
55 111 BY
114 121 BY
34 34 N-1
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AC 979034.
TO 1-7UL-1933-
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173138; STANDARD; PRT; 141 AA.
173138; STANDARD; STA
          Biochinie 59:893-894(1977).

- FUNCTION: INVOLVED IN GAMETOGENESIS AND STEROIDOGENSIS.

-1- SUBUNT: HETERODINER OF AN ALPHA AND A BETA CHAIN.

- SIMILARITY: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN.

FAMILA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GONADOTROPIN BETA-II CHAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00261, GLYCO_HORMONE_BETA_1; 1.
PROSITE; PS00689; GLYCO_HORMONE_BETA_2; 1.
HORMONE; GLYCOPTOTE:N; Signal.
27 SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
TISSUE-PILUITATY;
MEDLINE-90236229; Pubmed-2332148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  144 AA; 16039 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        37.6%; Score 292; DB 1; Length 142; 50.5%; Pred. No. 2.9e-20; Live 17; Mismatches 33; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GONADOTROPIN BETA-II CHAIN.
BY SINILARITY.
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29 77 BY SINTLARITY.
43 92 BY SINTLARITY.
46 130 BY SINTLARITY.
54 108 BY SINTLARITY.
113 120 BY SINTLARITY.
113 120 BY SINTLARITY.
133 33 N-LINED (GICHAC. . . ).
73 73 7 7 - 1.
86 86 7 - 8.
142 AA; 15872 MH; EJIEII7DA235C486 CRC64;
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PRR. C3610/9; C3610/9

INTERPO: DRR000359; Cys. knot.
INTERPO: IPR000359; Cys. knot.
INTERPO: IPR001545; Glyco_hormone_beta.
PRAIN FORONOSO; Cys. knot.
PRINTS; PR000418; GCTCTSNOT.
SAMAT; SNOMOSE; GHP.
PROSITE; PS0068; GLYCO_HORMONE_BETA_1; IPROSITE; PS00689; GLYCO_HORMONE_BETA_2; I.
HORMONOS; GLYCO_HORMONE_BETA_2; I.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Search completed: October 11, 2002, 11:57:35
Job time : 26 secs
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entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
HEDLINE-90046849; PubMed-2813416;
Sekine S., Saito A., Itoh H., Kawaguchi H., Itoh S.;
Wolecular cloning and sequence analysis of chum salmon gonadotropin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         33 PPCEPVNETVAVEKEGCEKCLVFQTTICSGHCLTKEPVKKSPFSTVYQHVCTYRDVRYET 92
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MEDLINES-9905301; PubMed-3192067;
TIOD H., SARAUCHI H.,
Tipe complete amino acid sequences of beta-subunits of two distinct chum salmon GTHS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pi0256;
01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 11, Last sequence update)
16-CT-2010 (Rel. 14, Last annocation update)
16-CT-2010 (Rel. 14). Last annocation update)
16-CT-2010 (Rel. 14). Last annocation update)
16-CT-2010 (Rel. 14). Leat annocation update)
16-CT-2010 (Rel. 14). Leat annocation update)
16-CT-2010 (Rel. 18). Released (Chordata, Crantata, Vertebrata; Euteleostomi;
16-CT-2010 (Rel. 18). Released (Released (Rele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gen. Comp. Endocrinol. 71:438-451(1988).
Gen. Comp. Endocrinol. 71:438-451(1988).
- I FUNCTION: INVOLVED IN GAMETOGENESIS AND STEROIDOGENSIS.
- SUBMIT: HETROCIKER OF AN ALPHA AND A BETA CHAIN.
- SUBMIT: BELONGS TO THE GLYCOPROTEIN HORMONES BETA CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 38.7%; Score 301; DB 1; Length 146; Best Local Similarity 54.3%; Pred. No. 4.5e-27. Matches 51; Conservative 15; Mismatches 28; Indels Matches 51; Conservative 15; Mismatches 28; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc. Natl. Acad. Sci. U.S.A. 86:8645-8649(1989).
                                                                  EMBL. 781015.

FRIS. 516763.

FRIS. 
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Gaps ö

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TISSUE-EMBRYONIC TROPROBLAST;

PEDCHENCE FROM N.A.

TISSUE-EMBRYONIC TROPROBLAST;

ALCOMPATION OF CHORIONIC GONDGOTOPIN EXPRESSION by Human and
The Acompation of Chorionic GondGotropin Expression by Human and
The Acompation of Chorionic GondGotropin Expression by Human and
The Acompation of Chorionic GondGotropin Expression by Human and
The Manager Prophibilist Cells.

The Manager Prophibilist Cells.

The Manager Prophibilist Cells.

The Manager Prophibilist Cells.

The Acompation of Chorionic Manager Prophibilist Cells.

The Manager Prophibilist Cells.

The PROSTITE PROBOGS; GINCO, HORMONE BETAL; UNKNOWN_1.

PROSTITE: PROBOGS; GINCO, HORMONE BETAL; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oscario, 2001 (TIEMBLEEL. 17, Created)
01-JUN-2001 (TIEMBLEEL. 17, Last sequence update)
01-JUN-2001 (TIEMBLEEL. 19, Last annotation update)
CERRIONIC GOMADOTROPIN BETA SUBUNIT 2.
Macaca fasticularis (Creb eating macaque) (Cynomolgus monkey).
Macaca instancia: Chordata. Craniata; Vertebrata; Buteleostomi, Mammalia; Eutherlas; Primates; Catarrhini; Cercopithecidae;
Cercopithecines, Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT; 165 AA
 091939
090461
090462
090461
06013
090413
091996
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091999
 PRELIMINARY;
Q9BEH1;
October 11, 2002, 11:26:58 ; Search time 70 Seconds (without alignment) alignment 348.461 Million cell updates/sec
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                                                                                                                   UG-09-813-398-3
777 PSKEPLRPRCRPINATLAVE.....SKAPPSLPSPSRLPGPSDT 141
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          GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd
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                                                     OM protein - protein search, using sw model
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Maximum Match 100%
Listing first 50 summaries
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sp_unclassified:*
sp_rvirus:*
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sp_archeap:*
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Perfect score:
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Query Match
91.2%; Score 631; DB 6; Length 165;
Best Local Similarity 92.7%; Pred. No. 2.4e-67;
Matches 115; Conservative 7; Wismatches 17; Indels

ogbed; macaca fasc Ogbed; macaca fasc Oggal; macaca mula Oggal; macaca mula Oggal; status norv Oggal; status norv Oggal; cavia porce Oggal; scyllorhinu Oggal; scyllorhinu Oggal; cetaluris porce Oggal; ctaluris porce Oggal; ctaluris porce

616 4486 4486 400 400 330 330 239 239 239 239 239 239 239

Description

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The SEQUENCE FROM N.A.

TO SPECIES-READLY;

The Immune responses and anti-fertility effect in rabbits induced by the immune responses and anti-fertility effect in rabbits induced by the immuniation.";

The immune responses and anti-fertility effect in rabbits induced by the beta-subunit of freess monkey chrionic gonadotropin (rmcdb) using DNA to be the subunit of freess monkey chrionic shammination.";

Butter is subunited (MAR-2001) to the EMEL/Genbank/DDBJ databases.

REMEL, AKS10115, AMS2770.1;

REMEL, AKS10115, AMS2770.1;

REMEL, AKS10115, AMS2700.1;

REMEL, AKS10195, Cys. knot.

REMEL, RESOURCE SEGONS (REMOTE SETAL); UNKNOWN.1.

REMELY SEGONOGE (SHB) IL

REMELY SEGONOGE (SHB) IN SETALI; UNKNOWN.1.
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SEQUENCE FROM N.A.
TISTURABLB/C: TISSUE-PLACENTA:
Chen Y. Peng J. TISSUE-placenta.
Tiffertility in mice induced by the rhesus monkey chorionic
gonadocropia besiduant glycoprocesin (rmcdb) using DNA immunization.*;
Submitted (JAW 2001) to the EMBL/GenBank/DDBJ databases.
EMBL: AF31307; AMMONGARE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
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099748.
099748.
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2001 (TrEMBLrel. 19, Last annotation update)
CHORIONIC GONDOTROPIN BETA-SUBUNIT GITCOPROTRIN.
KURS musculus (House).
Elektrotia (Metazoa, Chordata, Creniata; Vertebrata; Euteleostomi;
NCHI_TRANID=10090;
                                III
SECURICE FROM N.A.
SEPECIES-M.mulatta:
Chen Y. French of beta subunit of the rhesus monkey chorionic adoutcropin (FmCG).
Tidenication (FmCG).
Signatication (FmCG).
Signatication (FmCG).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 79.3%; Score 616; DB 6; Length 165; Best Local Similarity 82.0%; Pred. No. 1.1e-60; Matches 114; Conservative 7; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Therefore TRR00135; Cya_knot.
Interfor TRR001345; Glyc_hormone_beta.
Therefore TRR001345; Glyc_hormone_beta.
Fam. Pro0077; Cya_knot; I.
PROSITE; SR00084; GLYCO_HORMONE_BETA_1; UNKNOHW_1.
PROSITE; PS00089; GLYCO_HORMONE_BETA_2; UNKNOHW_1.
PROSITE; PS00899; GLYCO_HORMONE_BETA_2; UNKNOHW_1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141 SKDPPSPPSPSGLLEPAD 159
       NCBI_TaxID=9544, 9986;
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01-JUN-2001 (TERMELE1. I7, Created)
01-JUN-2001 (TERMELE1. I7, Last sequence update)
01-JUN-2001 (TERMELE1. I7, Last sequence update)
01-DEC-2001 (TERMELE1. I7) Last sequence update)
040-BEC-2001 (TERMELE1. I7) (Last annotation update)
040-BEC-2001 (TERMELE1. I7) (Last sequence update)
040-BEC-2001 (TERMELE1. I7) (Last sequence update)
040-BEC-2001 (TERMELE1. I7) (TERMELE1. I7) (Termelgus monkey).
040-BEC-2001 (TERMELE1. I7) (TERMELE1. Electropia monkey).
040-BEC-2001 (TERMELE1. I7) (TERM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE TROPHOBLAST;

WILSTUF-BUBRYONIC TROPHOBLAST;

**A Comparison of Chorionic Conadotropin Expression by Human and

**A comparison of Chorionic Conadotropin Expression by Human and

**A comparison of Chorionic Conadotropin Expression by Human and

**Bacque Tropholyast Cells.'

Submitted (JAN 2001) to the EMEL/GenBank/DDBJ databases.

HSSF: POL333; JANUE.

HSSF: POL333; JANUE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match 80.6%; Score 626; DB 6; Length 165; Best Local Stallarity 81.4%; Pred. No. 8.5e-67. Matches 114; Conservative 8; Hismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INTERPRO TRR001545; GYS_KNOT.
INTERPRO: IRR001545; GIYCO_hOTMONG_beta.
FRAM: FR000061; GYS_KNOT; 1.
SMART; SM00068; GHB; 1.
PROSITE; FS006861; GITCO_HORMONE_BETA_1; UNKNOHN_1.
SEQUENCE 165 AA; 17711 MW; 280DF602157D9940 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                     PRT; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                           RESULT 2
Q9BEH2
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Bukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Buteleostomi; Mamalla Butherla; Rodentla; Sclurognathi; Muridae; Murinae; Rattus. (KSLTaxiD-olli6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
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09246.
09246.
09246.
0926-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
PUTATIVE CHORIONIC GONADOTROPIN BETA SUBUNIT PRECURSOR
(FRACHERT).
(PAGAMENT).
(PAGAMENT).
Mammalia: Entheria: Rodentia: Hystricognathi: Caviidae; Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               POTENTIAL.
PUTATIVE CHORIONIC GONADOTROPIN BETA
                                                                              SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE PROM N.A.

SEQUENCE PROM N.A.

STAIN-SPANONE DAMLEY;

A Tabla F.P., Rannikko A., Whitaniah all 1;

LuteInizing brownsone beta-subunit in the rat.;

LuteInizing brownsone beta-subunit in the rat.;

LuteInizing brownsone beta-subunit in the rat.;

Literarpo: JRRO02400; GE_CYSKNOT.

REST: POLO333; LXUL.

REST: POLO333; LXUL.

REST: POLO333; LXUL.

REST: PRO0039; CF_CYSKNOT.

REST: PRO0069; GE_CYSKNOT.

REART: RO0069; GE_CYSKNOT.

REART: PSO0069; GLYCO_HORNONE_BETA_1; UNKNOWN_1.

REST: PSO0069; GLYCO_HORNONE_BETA_1; UNKNOWN_1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 56.01; Score 435; DB 11; Length 139; Best Local Similarity 64.64; Pred. No. 1.1e-04. Matches 73; Conservative 17; Mismatches 23; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUBUNIT.
SEQUENCE 127 AA; 13609 MW; 326B14DD6B72C2B4 CRC64;
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                                                             Ouery Match 57,7%; Score 448; DB 6; Length 142;
Best Local Similarity 62.0%; Pred. No. 4.1e-47; Indels 10; Gaps
Matches 80; Conservative 13; Mismatches 26; Indels 10; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Panthera tigris altaica.
Bukaryota; Netazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia: Eutheria; Carnivora; Fissipedia; Felidae; Panthera.
NCBL_max1D-74533;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Baldwin D.M., Bedows E., Miller-Lindholm A.K., Sherman G.B., Wilken J.A.;
Wilken J.A.;
Stharacterization of recombinant tiger gonadotropins.";
Schmitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, AF35498; AAK30569.1;
TMUL. AKSSP; P01233; IMUL.
Best Local Similarity 82.04; Pred. No. 1.1e-60;
Matches 114; Conservative 7; Mismatches 18; Indels
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INTERPROJ. PRR001345; Cys_knot.
INTERPROJ. PRR001345; Clyc_hormone_beta.
INTERPROJ. PRR001345; Clyc_hormone_beta.
PRR00176; SMOROGG, GHB. 1.
PROSITE; PS000689; GHCO_HORMONE_BETA_1; UNKNOWN_1.
SEQUENCE 142 AA: 15117 MW; 234986A0271943DB CRC64;
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TISSUE-PITUITARY;
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Q9BDI9
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"Isolation and characterization of the black carp LH beta submit.";
Submitted (NVV-2000) to the EMBL/GenBank/DDBJ databases.
BEREL, RF19560, AAKO744.1;
HISSP, P01231, IXU.
HISSP, GOURDE ANKO755, Cys. Knot.
Interpro; IPR001555, Glyco_hormone_beta.
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01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2001 (TREMBLrel. 19, Last annotation update)
LOTELINIZING HORMONE BETA SUBURT.
Mylopharyngodon piceus. SUBURT.
Mylopharyngodon piceus. Chordata, Craniata, Vertebrata; Buteleostomi;
Actinopery911; Neoptery941; Teleostel; Buteleostomi;
Cyprinicomes: Cyprinidae; Mylopharyngodon.
NOBI_TAXID-75156;
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"Cloning of a CDNA encoding the luteinizing hormone beta chain
precursor in the marsupial, Monodelphis domestica.";
Submitted (SEP-2001) to the BMEL/GenBank/DDBJ databases.
ERMEL: AYOSA(75: AALI3373.1;
SEQUENCE 141 AA, 15031 MW; SASBESEADIED9285 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            51.54; Score 400; DB 11; Length 141; 61.94; Pred. No. 8.8e-37; Live 14; Mismatches 29; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 49.0%; Score 381; DB 6; Length 141; Best Local Similarity 61.1%; Pred. No. 1.1.e-3; Metches 66; Conservative 11; Mismatches 13; Indels Metches 66; Conservative 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67 SIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDP 114
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SUBUNIT.
15122 MW; 690EDF3CA555A6A3 CRC64;
                                                                                                                                                                                                                                                                               Conservative
                                                   141 AA;
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Best Local Similarity
Matches 70; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0934A;
01-DBC-3001 (TREMBLEG. 19, Created)
01-DBC-3001 (TREMBLEG. 19, Last sequence update)
01-DBC-3001 (TREMBLEG. 19, Last sequence update)
01-DBC-3001 (TREMBLEG. 19, Last sequence update)
LUTEINIZING HORMONE BETA SUDUNIT PRECURSOR (FRAGENT).
EURA POCCELIUS (Gulnea plg).
EURA POCCELIUS (Gulnea plg).
EURA POCCELIUS Metacoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutherria; Rodentia; Hystricognathi; Caviidae; Cavia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEGUENCE FROM N.A.
MEDINE-211559525, PubMed-11357063;
MEDINE-211559525, PubMed-11357063;
MEDERMAN G. B., Hellman D.F., Hoss A.J., Bunick D., Lund L.A.;
"Messenger RRNs encoding the beta subunits of guinea pig (cavia porcellus) luteinialing hormone (gpLH) and putative chorionic gonadotropin (gpCG) are transcribed from a single-copy gpLH/CGbeta gonadotropin (gpCG) are transcribed from a single-copy gpLH/CGbeta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gavia porcellus (Guinea pig).

Gavia porcellus (Guinea pig).

Bikaryota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi;

Mammalia: Butheria; Rodentia; Hystricognathi; Caviidae; Cavia.

NCBL_MATPLO1041;
                             POTENTIAL.
PUTATIVE LUTEINIZING HORMONE BETA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NOM_TER 1 1 POTENTIAL.
SIGNAL - 1 1 POTENTIAL.
CRAIN 15 135 LUTEINIZING HORMONE BETA SUBUNIT.
SEQUENCE 135 AA: 14432 MM; A44CSJDEDCS607AE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 51.5; Score 400; DB 11; Length 135; Best Local Similarity 61.99; Pred, No. 8.44-77. Matches 79; Conservative 14; Mismatches 29; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          092448 PRELIMINARY; PRT; 141 AA.
092448; 092461 (TERMELTE1.19, Created)
01-DEC-2001 (TERMELTE1.19, Last sequence update)
01-DEC-2001 (TERMELTE1.19, Last sequence update)
01-DEC-2001 (TERMELTE1.19, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT; 135 AA.
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J. Mol. Endocrinol. 26:267-280(2001).
EMBL; AF355775; AAK84305.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene.";
J. Mol. Endocrinol. 26:267-280(2001).
EMBL: AF356595; AAK84306.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
141
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10 924A
10 924A
10 924A
10 924B
10 92
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Q924A8
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The SEQUENCE FROK N.A.

This page 2., Valts J., Meyer H.H.D.; the beta LH determinant loop to Fischer S., Valts J., Meyer H.H.D.; the beta LH determinant loop to The Contiderated anino acid sequence of the beta LH determinant loop to the contiderate perissodactyls and the estimated impact on the biological activity.

It submitted (FEB-1999) to the EMBL/GenBank/DDBJ databases.

EMBL, AF04/503; AAC04451.1; FEMEL, AF04/503; CYS.AAC0451.1; FEMEL, AF04/503; CYS.AAC0451.1; FEMEL, AF04/503; CYS.AAC0451.1; FEMEL, AF04/503; CHBL/GHBL.1; FEMEL, AF04/503; CHBL/GHBL.2; T.H.C. CHBL/GHBL/GHBL.2; T.H.C. CHBL/GHBL/GHBL/GHBL/GHBL/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 PVEGSLMQPCQPINQTVSVEKEGCPTCLVIQTPICSGHCVTKEPVFKSPFSTVYQHVCTY 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 PSKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNY 60
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040619.
01-UNN-1998 (TYEMBLEL. 06, Created)
01-UNN-1998 (TYEMBLEL. 10, Last sequence update)
01-UNL-1998 (TYEMBLEL. 19, Last sequence update)
UTELNIZING HORNONE/CHORIONIC GONADOTROPHIN BETA-SUBUNIT
(FRACHEN)
EQUAC PETA.
EQUAC PETA.
EQUAC PETA.
EQUAC PETA.
EQUAL PHAIONUS (Kulan).
EVALAZOA: Chordeta; Creniata; Vertebreta; Euteleostomi; Weil_Taxip—9794;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 38.0%; Score 295; DB 13; Length 142;
Bert Local Similarity 31.5%; Pred. NO. 46-25;
Matches 32; Conservative 16; Mismatches 33; Indels (
    P SEQUENCE FROM N.A.

MOTITAT. T. YOSHIZAKI G., Takeuchi T.;

Motitat. T. Yoshizaki G., Takeuchi T.;

Submitted (NOV-2000) to the EMEL/GenBank/DDBJ databases.

R EMEL, AB050816, BAB17657.1;

R HSSP: PO1233; LXU.

R HESP: PO1233; LXU.

R INEEPFO: IPR001359, Cys_knot.

R INEEPFO: IPR001359, Cys_knot.

R SMART; SR00065, Gys_knot.

R SMART; SR00065, Gys_knot.

R SMART; PR000561; GitYCO, BORNONE_BETA_1; UNKNOWN_1.

R PROSTEE; PS000561; GitYCO, BORNONE_BETA_1; UNKNOWN_1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chorion. 1 1 1 NOW TER 19 89 89 SEQUENCE 89 AA; 9369 MM; E0EEE713778C5566 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                102 GGPKDHPLTCDDPRFQDSSSSKAPPPSLPSPS 133
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Best Loc
Matches
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DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE LUTEINIZING HORMONE BETA SUBUNIT.
OS ULA PORTO BETA SUBUNIT.
OS CALLING HORMONE DETA SUBUNIT.
OS CALLING HORMONE DETA SUBUNIT.
OS CALLING HORMONE CONTRACT CARRIERA SUBURITALS ELECTOR CALLING HORMONE CALLING HORMONE SUBURITAL SUBURITALS SUBURITATION CALLING HORMONE SUBURITAL SUBURIT
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                                                                                                                                                                                                                                                                                                                                    8 PRCRPINATLAVEKEGCPVCITVNTTICAGYCPTHTRVLQGVLPALPQVVCNYRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                Scyliothus canicula (Spotted dogfish) (Spotted catshark).
Blearyota: Wetezaca: Chordata: Craniata; Vertebrata: Chondrinthyes;
Elasmobranchii; Galecomorphii; Galecoldea; Garcharhiniformes;
Scyliothinidae: Scyliothinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match
Ouery Match
131;
Best Local Similarity 38 05; Pered. No. 37-25;
Best Conservative 19; Mismicches 28; Indels 0;
Matches 48; Conservative 19; Mismicches 28; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIGNAL 1 19 POTENTIAL,
CHAIN 20 131 LUTEINIZING HORMONE BETA SUBUNIT.
SEQUENCE 131 AA, 14656 MM; D3FB392c62A6AF77 CRC64;
                                                                                                                                                                                                       Ouery Watch State 130.75; Score 301; DB 13; Length 140; Best Local Similarity 54.18; Pred No. 6.5e-67; Matches 51; Conservative 15; Mismatches 28; Indels (Matches 51; Conservative 15)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouerat B.;
"Duality of gondotropins in gnathostomes.";
"Duality of gondotropins in gnathostomes.";
"Duality of Grandotropins in EMBL/GenBank/DDBJ databases.
EMBL; AJ310345; CAC43236.1;
"Signal."

19 POTENTIAL.
Pfam; PP00007; Cya_knot; 1.
SMART; SW0006B; GHB; 1.
PROSITE; PS0026B; GLYCO_HORMONE_BETA_1; UNKNOWN_1.
PROSITE; PS0068B; GLYCO_HORMONE_BETA_2; 1.
SEQUENCE 140 AA; 15820 WH; BF12723F35D5A010 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-DEC-2001 (TrEMBLE1. 19, Created)
- DEC-2001 (TrEMBLE1. 19, Last sequence update)
01-DEC-2001 (TrEMBLE1. 19, Last sequence update)
LUTEINIZING HORMONE BETA SUBUNIT PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68 IRLPGCPRGVNPVVSYAVALSCOCALCRRSTTDC 101:11 | 11 | 1:1| | 1:1| | 1:1| | 87 VRLPDCPPGVDPHITYPVALSCDCSLCTMDTSDC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT; 131 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
TISSUE-PITUITARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       090W63;
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Q90W63
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090092
10 090092
DT 01-MAR
DT 01-MAR
DE LUTERN
GN LH BET
GN CC EURARY
OC EURARY
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OC PECTOR
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ROUGENCE FROM N.A.

RC ISSUE-PUTUTARY;

RX MEDLINE-20318422; PubMed-10859263;

RA Guerat B., Sellouk A., Salmon C.,

RY Phylogenetic analysis of the vertebrate glycoprotein hormone family

RY including mew sequences of sturgeon (Acipenser bearl) subunits of the

RY PHYLOGENET AND STRUCTURE AND
                                                                                                                                                                                                                                                                           44 RVLQGVLPALPQVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGG 103
                                                                                                                                                                                                                                                                                                                                                   10 CRPINATLAVEREGCPYCITVNTICAGYCPTMTRVLQGVLPALPQVYCNYRDVRFESIR 69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Acipenser baerli (Siberian sturgeon).
Bukaryota, Metazoa. Chordata, Craniata, Vertebrata, Euteleostomi,
Actinopterygii, Chondrostei, Acipenseriformes; Acipenseridae;
Acipenserines, Acipenser.
MCBL_TaxID=27689;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LURROPIN BETÀ SUBUNIT
Kenpus laevis (African clawed frog).
Rukaryora: Metazoa: Chordata, Cranlata; Vertebrata; Buteleostomi;
Maphibla: Butrachia, Anura; Mesobatrachia; Pipoidea; Pipidae:
Kenopodinae; Kenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match 36.2; Score 281; DB 13; Length 137; Best Local Similarity 45.54; Pred. No. 1.44-23; Matches 46; Conservative 21; Mismatches 30; Indels 4
                                                         Ouery Match 37.1%; Score 288; DB 6; Length 89; Best Local Similarity 62.2%; Pred. No. 1.59-24; Matches 56; Conservative 8; Mismatches 22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL 1 22 POTENTIAL.
CHAIN 3 137 LUTEINIZING HORMONE.
CODENNE 137 AA, 14757 WW. 37CFFB0BB2955607 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G1-C7-2000 (TrEMELICAL 15, Created)
01-C7-2000 (TREMELICAL 15, Last sequence update)
01-057-2000 (TrEMELICAL 15, Last sequence update)
10-057-2001 (TrEMELICAL 15, Last amnotation update)
Last the complex of the compl
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01-DRC-2001 (TrEMBLrel. 19, Last sequence update)
01-DRC-2001 (TrEMBLrel. 19, Last annocation update)
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Q91999
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Q90WC1
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Fischer S., Velte J., Meyer H.H.D.;
Flacher S., Velte J., Meyer H.H.D.;
Wordschild and amino acid sequence of the beta-LH determinant loop
from different Perissodactyls and the estimated impact on the
bloopical activity.;
Submitted (FEB-1998) to the EMBL/GenBank/DDBJ databases.
HSSEN: F01131: 1XUC041560.1;
HSSEN: F01131: 1XUC041560.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Liu Z.J., Kim S., Karsi A., Dunham R.;
"Channel cat'ls gonadortopil beta subunits: cDNA cloning and their expression dufing ovulation.";
Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
EMBLS, AFILI3193, AAG21156.1;
HSSP; P01233; IXUL.
                                                                                                                                 1-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2001 (TrEMBLrel. 19, Last annotation update)
00-DEC-2001 (TREMBLrel. 19, Last annotation update)
00-MADOTMOPIN BETA 2 SUBUNIT.
EUKALOUS PURCETUR (Channel catifals).
EUKARJOUS, Metacos, Chordata, Craniata, Vertebrata; Euteleostoni;
Actinopterygli, Neopterygli; Teleostel; Euteleostel; Ostarlophysi;
NCBL_TAXID-3998;
NCBL_TAXID-3998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MGCG-BETĀ.
Eguus aebar hartmannae.
Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mamaalia: Butheria; Perissodactyla; Equidae; Equus.
MCBL_TARIO-3135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 37.3%; Score 290; DB 13; Length 140; Dest Local Similarity 46.5%; Pred. Ro. 1.44-24; Matches 49; Conservative 19; Mismatches 33; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-1998 (TrEMBLRel. 06, Created)
01-JUN-1998 (FREBLRel. 06, Last sequence update)
01-DC-2001 (TREMBLRel. 19, Last annotation update)
LUTELNITUR HORMONE/CHORIONIC GONADOTROPHIN BETA-SUBUNIT
(FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro: IPR000359; Cys_knot.
InterPro: IPR001545; Gly_Cyc_hormone_beta.
Famer: PR00007; Cys_knot; 1.
SAMET: SW00065; GHB: 1.
PR0SITE; PS00261; GLYCO, HORMONE_BETA_1; UNKNOWN_1.
SROUBENCE 140 AA; 15787 MH; AAA74CAA7E3D2882 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 89 89 89
89 AA: 9325 MW; 2AD973AEC7EAC5C8 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89 AA.
                                                                        140 AA.
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InterPro; IPR001345; Clyco_hormone_beta.
Pfam; PF00007; Cys_knot; 1.
SMART; SM00066, GHB; 1.
PROS!TE; PS00669; GLRCO_HORMONE_BETa_2; 1.
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                                                                PRELIMINARY;
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09DG80

AC 09DG80

TO 11-MAR

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RESULT 21
09DEMO
10 09DEMO
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12 09DEMO
13 09DEMO
14 04NR-2001 (TEPMELTE). 16, Created)
15 0-MAR-2001 (TEPMELTE). 16, Last sequence update)
16 01-MR-2001 (TEPMELTE). 16, Last sequence update)
17 01-MR-2001 (TEPMELTE). 16, Last sequence update)
18 00AADOTROPIN II BETA SUBUNIT PRECUESOR.
18 MATATOR MATOR AS BELANDEMORY PRECUESOR.
18 MATORIA MERADA. TONDATER: CITAINIA: VETEBATEA' Euteleostem!;
18 ACAILHODOTERYJH: NoopheryjH: Teleostel: Metcheostel; NooplerysyH: Percomorpha; Perciformes: Percoidel:
20 Sparidae: Pagrue.
21 NOOPLETYJH: Percomorpha; Perciformes: Percoidel:
22 NOOPLETYJH: Percomorpha; Perciformes: Percoidel:
23 NOOPLETYJH: Percomorpha; Perciformes: Percoidel:
24 NOOPLETYJH: Percomorpha; Percoidel:
25 NOOPLETYJH: PERCOIDER:
25 NOOPLETYJH: PERCOIDE
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                                                            01-DEC-2001 (TERMELE). 19, Last sequence update)
101-DEC-2001 (TERMELE). 19, Last annotation update)
10TEINILINE GRANONE BETA SUBUNIT PRECURSOR.
10TEINILINE GRANONE GRAN (FOR) (NEWS F. FOR)
10TEINILINE GRANONE GRAN (FOR) (NEWS F. FOR)
10TEINILINE GRANONE GRANONE (FOR) (NEWS F. FOR)
10TEINILINE FAITENINE, MAUER, NeoDatrachia; Ranoides; Rana.
10TEINILINE GRANONE (FOR)
10TEINILINE GRANONE (FOR)
10TEINILINE GRANONE (FOR)
10TEINILINE GRANONE (FOR)
10TEINILINE (FO
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27 138 LUTEINIZING HORMONE BETA SUBUNIT.
138 AA; 15701 MM; 9C1EB0777B34BGCF CRC64;
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13.14; Score 257; DB 13; Length 138;
Best Local Similarity 41.99; Fred. No. 6.4e-21;
Matches 44; Conservative 19; Mismatches 42; Indels C
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33.1%; Score 257; DB 13; Length 146;
Best Local Similarity 46.2%; Pred. No. 6.8e-21.
Matches 48; Conservative 17; Mismatches 37; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Querat B.;

*Tourition of glycoprotein hormones in gnathostomes.";

*Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases
EMBL; AJ311355; CAC39252.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       67 SIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTC 111
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SEQUENCE FROM N.A.
TISSUE-PITUITARY;
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CHAIN
SEQUENCE
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Best Local Si
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Best Local Smilarity 44.7%; pred: No.4, 4.3e.7;
Matches 46; Conservative 17; Wismatches 46; Conservative 17; Wismatches 69; Gonservative 17; Wismatches 186; Conservative 187; Wismatches 186; Conservative 187; Wismatches 188; Conservative 187; Wismatches 188; Conservative 188; Conservati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7 RPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRFE 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 RRICHPINATISAEKDDCPICVTLTTTVCTGYCLTRDPVFKNALSSVXQNICTYNEIRYD 80
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SERIANDE BERA.
SEYSBERT.

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FOLLICLE STIMULATING HORMONE BETA SUBUNIT.
; 1C141453C3DCF8C2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 33:34; Score 259; DB 13; Length 137; Best Local Smallarity 42:11; Pred. Mo. 2. 18e-21; Matches 40; Conservative 22; Manatches 32; Indels 0
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Publity of gonadotropins in gnathostomes.";
Submitted (APR-2001) to the EMBL/GenBank/DDBJ databases.
EMBL: AJ310344; CAC43235.1;
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01-DEC-2001 (TERBLEE). 19, Last sequence update)
01-DEC-2001 (TERBLEE). 19, Last sequence update)
FOLLICLE STIMULATING HORMONE BETA SUBUNT PRECURSOR
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:|:|| | | :| :| ||:||:||
81 TIKLPDCLPGTDPFFTYPVAVSCKCNQCKHDYSDC 115
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                                                                                                                                                                                                      138 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     090WG9 PRELIMINARY; PRT;
090WG9;
01-DEC-2001 (TEMBLEE1. 19, Created)
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SEQUENCE FROM N.A.
TISSUE-PITUITARY;
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NCBI_TaxID-8355;
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Q90WG9
ID Q90WG9
AC Q90WG9
DT 01-DEC
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090W64
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Watch 32.6%; Score 253.5; DB 13; Length 145; Local Similarity 44.6%; Pred. No. 1.6e-20; hes 50; Conservative 18; Mismatches 43; Indels 1; Gaps
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TISSUE-FIUTIARY:
RIJIANTS-212564; PubMed-11316417;
Kajianre S., Yoshiura Y., Suzuki M., Alda K.;
Kajianre S., Yoshiura Y., Suzuki M.,
CDMA clonigo of two gonadotropin beta subunits (GTH-Ibeta and
-Ilbeta) and their expression profiles during gametogenesis in the
Japanese flounder (Paralichthys olivaceus)
GGn. Comp. Endocrinol. 122:117-129(2001).
EMEL. M8042181; BAR473881; BAR473881;
BAR5. ABOURDENCE 145 AA; 16295 WH; BODCES2EE3E75OCC CRC64;
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11-MAR 2001 (TEMBLIEL 16, Created)
11-MAR 2001 (TEMBLIEL 16, Last sequence update)
101-MAR 2001 (TEMBLIEL 16, Last sequence update)
101-MAR 2001 (TEMBLIEL 16, Last sequence update)
101-MAR 2001 (TEMBLIEL 18, Last amotation update)
101-MAR 2001 (TEMBLIEL)
101 Last sequence update)
102-103 (TEMBLIEL)
103 Last sequence (TEMBLIEL)
104 Last sequence (TEMBLIEL)
105 Last sequence (TEMBLIEL)
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                                                                                                                                                                                                                            Query Match 32.94; Score 255.5; DB 11; Length 80; Best Local Similarity 61.64; Pred. No. 5.3e-21; Metches 45; Conservative 11; Mismatches 16; Indels 1
Pfam; PF00007; Cya_knot; 1.
PRARTY; SM00684, GHB.
PROSITE: PS00689; GLYCO SONRONE_BETA_2; 1.
SEQUENCE 80 AA; 8515 MM; F9EA66C2FD6FC97D CRC64;
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SEQUENCE FROM N.A.
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Best Local S
Matches 50
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090681
10 090681
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07 01-MAR
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Q90W55
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The Tischer S., Vetts J., Meyer H.H.D.;

The Flacher S., Vetts J., Meyer H.H.D.;

The Tischer S., Vetts J., Meyer H.H.D.;

The Modificent Perissodactyls and the estimated impact on the biological activity.

The Submitted (FER-1999) to the EMBL/GenBank/DDBJ databases.

The Submitted (FER-1999) to the EMBL/GenBank/DDBJ databases.

The MSSP; PO1233; IXUL.

THE MSSP; PO1234; Giyac_hormone_beta.

THE MSSP; RO00007; Cys_knot: 1.

THE MSSP; PS000699; GIRS 1.

THE MSSP; PS000699; GIRS 1.
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Bukaryota; Wetazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Amamaila; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBL_maxip.10116;
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                                                                                                                                                                                                                                                                                                                                                                                                                        01-71W-1998 (TremBare. 06, Created)
01-71W-1998 (TremBare.) 06, Last sequence update)
01-70W-1998 (TremBare.) 06, Last sequence update)
01-70W-1998 (TremBare.) 19, Last amotation update)
11W-1971 (TRAMBARE.) 19, Last amotation update)
11W-1971 (TRAMBARE.) 19, Last amotation update)
11W-1971 (TRAMBARE.) 19 INDIVIDUAL UPDATED 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 111

SEQUENCE FROM N.A.

STRAIN-SPRAGUE DANLEY.

STRAIN-SPRAGUE DANLEY.

STRAIN-SPRAGUE DANLEY.

STRAIN-SPRAGUE DANLEY.

STRAIN-SPRAGUE DANLEY.

SANGE F., RADALKA A., HURTANIEMI I.;

STRAIN-SPRAGUE A., HURTANIEMI I.;

BLOCHEM. BLOPHYS. Res. Commun. 210:858-865(1995).

BLOCHEM. BLOPHYS. Res. Commun. 210:858-865(1995).
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68 IRLPGCPRGVNPVVSYAVALSCOCALCRRSTTDCGGFRUBPLTC 111
68 IRLPGCPGGVDPVTVSYAVSCHGLANDYSOCTESSLEPHE | 18
95 FELPOCPGVUDPVTYPAVSCHGLANDYSOCTESSLEPHE | 18
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SEQUENCE 82 Aa; 8643 MW; 270411BA19B78A37 CRC64;
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                                                                                                                                                                                                                                                                                                                                      82 AA.
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InterPro; IPR001545; Glyco_hormone_beta.
                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
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Q63013
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RC STRAIN-KANSAS;
RA Liu Z.J. Karsi A., Dunham R.;
RI 'Channel caffish gonadotropin beta-subunits: CDNA cloning and their expression during ovulation.'
RI 'Channel caffish gonadotropin beta-subunits: CDNA cloning and their expression during ovulation.'
RE SUBUNITED (DEC. 1938) to the EMBL/GenBank/DOBJ databases.
DN REMED: ARIJISI): ANGASIJS: Li.
DN RESE: POLIS: IRRODISS; CLYC.
DN InterPro: IRRODISS; CLYC.
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AND CONTROL OF CONTROL O
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Best Local Similarity 43.8%; Pred. No. 2.8e-20;
Matches 46; Conservative 15; Mismatches 44; Indels 0; Gaps
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Human chorionic Human chorionic Human chorionic	HCG beta subunit-J	Human CG beta subu HCG beta subunit-J HCG beta subunit-J	Single chain youad Single chain gonad Human single chain	Human single chain HCG beta subunit-J	Ruman beta-hCG pro	Human chorionic go	Human chorionic go Glycoprotein hormo	Human betahCG/beta Alpha-mating facto	hCG methlonine sub	Glycoprotein hormo	Glycoprotein hormo	Human chorlonic go		Glycoprotein hormo		Human single chain	hCG histidine subs hCG methionine sub	hCG-beta analogue Glycoprotein hormo	Glycoprotein hormo	hCG-beta analogue	Single chain gonad Partially deglycos	hCG histidine subs	hCG/hLH chimera, A	the charles and muta	Chorionic gonadotr	hCG/nLH chimera, A hCG histidine subs	Chorionic gonadotr	Human CG beta-subu	hCG/hFSH chimera,	Chorlonic gonadotr	Chorionic gonadotr	ncG-beta analogue hCG/eLH chimera, E	hCG/hFSH chimera,	hCG/hLH chimera, A Human CG beta subu	CG beta	Human CG alpha sub	Chorionic gonadotr	Chorionic gonadotr	hCG/hFSH chimera,	hCG/bLH chimera, D
165 20 AAY05748 165 20 AAW99533 165 21 AAB15358 165 22 AAB49896	222	2888	222	555	25	13	165 20 AAW9950B	7 7	77		22	11:	2 2		2,5	125	22	202		20					18		81		212	18	18	3 2	12		50	208 20 AAY43306	7 8	181	145 12 AAR15068	
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GenCore version 5.1.3 Copyright (c) 1993 - 2002 Compugen Ltd.	protein search, using sw model	October 11, 2002, 17:57:02; Search time 31 Seconds (Without alignments)		777 1 PSKEPLRPRCRPINATLAVESKAPPPSLPSPSRLPGPSDT 141	BLOSUM62 Canon 10 0 Canowt 0 6	•	restanes	or nits satisfying chosen parameters: 747574	Minimum DB seq length: 0 Maximum DB seq length: 2000000000	n Match Ot	Maximum Match 100% Listing first 350 summaries	033803.*	<pre>// / // // // // // // // // // // // /</pre>	0S1/gcgdata/geneseq/geneseqp-emb1/AA1981.DAT:* 0S1/gcgdata/geneseg/genesegp-emb1/AA1982.DAT:*	1: /SIDSI/gcgdata/geneseq/geneseqp-embl/AA1983.DAT:*	SSI/gcgdata/geneseq/geneseqp-embl/Asi985.Dar:	JSI/gcgdata/geneseq/geneseqp-embI/AAI98b.DAT:▼ JSI/gcgdata/geneseq/geneseqp-embI/AAI987.DAT:◆	oSI/gcgdata/geneseq/geneseqp-embl/AA1988.DAT:* (DSI/gcgdata/geneseq/geneseqp-embl/AA1989.DAT:*	IDSI/gcgdata/geneseg/genesegp-embl/AA1990.DAT:* IDSI/gcgdata/geneseg/genesegn-embl/AA1991	IDS1/gcgdata/geneseq/geneseqp-emb1/AA1992.DAT:*	lDS1/gcgdata/geneseq/geneseqp·emb1/AA1993.DAT:* lDS1/gcgdata/geneseq/geneseqp·emb1/AA1994.DAT:*	DSI/gcgdata/geneseq/geneseqp-embl/AA1995.DAT:*	DS1/gcgdata/geneseq/geneseqp-emb1/AA1997.DA1: DS1/gcgdata/geneseq/geneseqp-emb1/AA1997.DAT:*	DS1/gcgdata/geneseq/geneseqp-emb1/AA1998.DAT:*	DS1/gcgdata/geneseq/geneseqp.emb1/AA2000.DAT:*	ĕ	number of results predicted by chance to have a	and is derived by analysis of the total score distribution.	OG LO 4 MALLS	Ď	Owery	d	21 AAY92000 Human	20 AAW93434 Human 20 AAW95520 Human	21 AAB20558 Human chorionic	22 AAU04619 Human chorionic	22 AAU00709 Beta-subunit of	22 AAU01139 Human choricolo	AAB04121	12 AARI3043 Human chorionic

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AARI 5117 AARI 5119 AARI 5119 AARI 5109 AARI 5	AAE15078 AAR15071 AAR15071 AAR86265 AAR86256 AAR8625460 AAE04606 AAE04524
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The present invention describes an antigen (A) comprising a carrier chemically conjugated with a polypeptide (I) capable of elicting of antibody response to human chorionic gonadotropin (GG) and not to human clustenisting homone (LH), or a polypeptide (I) capable of elicting antibody response to human GG. (A) has cycostatic, contraceptive, antibipartensive and antidodabetic activities, and can be used as part of a vaccine. (A) has cycostatic, contraception, abortion and for treating homone related diseases, for treating homone associated carcinomas and to boost an animals resistance to exogenous proteins e.g. viral proteins. (A) is also useful in animal fertility control, for treating cancer, hypertension, diabetes and related vacuular control, for treating cancer, hypertension, diabetes and related vacuular control, succeeded of influenced by unusual excesses of certain controls sucked or influenced by unusual excesses of certain controls capability and effective and safe method of terminating a perganney soon provides an effective and safe method of terminating a perganney soon after conception which does not have serious harmful side effects.

The present sequence represents the human CG beta subunit amino acid invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Numan, chorionic gonadotropin antigen; follicle stimulating hormone; contraception, abortion; hormone related disease, carcinoma; cytostatic; contraceptive; antiinfertility; antihypertensive; antidiabetic; vaccine; fertility; cancer; hypertension; diabetes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human chorionic gonadotropin beta subunit amino acid sequence.
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                                                                                                                                                                                                                                    AAB20558 standard; protein; 145 AA.
     121 SKAPPPSLPSPSRLPGPSDT 140
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15-7UL-1987.
26-AUG-1992.
17-FEB-1989.
17-FEB-1989.
16-CCT-1973.
16-CCT-1975.
16-AN-1975.
16-AN-1989.
18-MAY-1981.
18-MAY-1983.
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                                                                                                                                                                                                                                                                                                                        AAB20558;
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N-glycosylation site; follicle stimulating hormone; luteinising hormone; thyroid stimulating hormone; in vitro fertilisation; fertility; mutation; beta subunit; glycoprotein.
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/note- "wild-type Val at this position can be mutated to Asn to introduce a new N-glycosylation site; see claim 3*
                                                                                                                                                                                                                                                                                                        /note= "wild-type Phe at this position can be mutated to Asn to introduce a new N-glycosylation site; see claim 3"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Determining the 3-dimensional coordinates of chorionic gonadotrophin and computer-assisted re-design of the chamical structure - used for production of gonadotrophin hormone analogues
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grootenhuis PDJ, Harris DC, Isaacs NW, Lapthorn AJ;
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Misc-difference 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Examples; Fig 2; 60pp; English.
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                                                                                                                                                                 Homo sapiens.
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7805-0936876. 8705-093748. 9205-0935331. 8905-0311331. 7305-046821. 7405-046295. 7505-062203. 8005-012628. 8105-033690. 8380-0560778.

95US-0466445.

Sequence

145 AA;

122 SKAPPPSLPSPSRLPGPSDT 141

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as diagnostic tools to detect the presence of antibodies with respect to assay kits for assessing the levels of these hornores in various samples as and in detecting and puritying receptors to which the native hormones bind. The single chain forms of the heterodiners or homodiners bave the following advantages over their dimeric forms: they are more stable, problems of recombinant production are reduced since only a single center is needed to transcribe, translate and process, provide an alternate form thus permitting fine tuning of activity levels and of in vivo half lives. Single chain forms are unique starting materials for identifying truncated forms with the activity of the dimer. The linkage between the submults permits the protein to be engineered without disturbing the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human chorionic gonadotropin beta-subunit fragment (1-145 amino acids).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; single chain gonadotropin analog; anti-infertility; drug;
peptide therapy; interlaising hormone, LH; follicle stimulating hormone;
FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG;
glycoprotein; infertility; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "Residue '0' is present at this location in the sequence shown in column 33 of the specification"
                                                                                                                                                                                                                                                                                                                                                        -62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                        61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDFRPQDSSS 120
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                                                                                                                                                                                                                                          Query Match 99.14; Score 770; DB 22; Length 145; Best Local Similarity 100.0%; Pred. No. 1.8e-62; Marches 140; Conservative 0; Mismarches 0; Indels (Marches 140; Conservative 0; Mismarches 0; Indels 0
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94US-0310590.
94US-0314628.
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95US-0475049.
97US-0853524.
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Misc-difference
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12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
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AAE04491
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                                                                                                                                                                                                                                                                                                                                                                                                                   Human; chorionic gonadotropin; hCG; glycoprotein hormone; infertility;
luteinistum hormone; Lif; follicle stimulating hormone; FSH;
thyroid stimulating hormone; TH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques
                                                                                                                                   Gaps
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                 Ouery Match
99.18; Score 770; DB 21; Length 145;
Best Local Similarity 100.0%, Pred. Wo. 18e-62;
Matches 140; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                       Human chorionic gonadotropin (hCG) beta, amino acids 1-145.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 19; Column 34; 86pp; English.
                                                                                                                                                                                                                                                                                                 AAU04619 standard; protein; 145 AA
                                                                                                                                                                                           970S-0918288.
940S-0199382.
940S-0289396.
940S-0314628.
940S-0351891.
950S-0475049.
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                                                                                                                                                                                                                                                                                                                                                          23-OCT-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US6242580-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-AUG-1997;
18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUN-2001.
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The sequence represents the beta-subunit of human chorionic gonadotrophin detacks. For the sequence represents the beta-subunit of human chorionic polaratic have disulficide bridged analogues of amino acid residues 38-57 of beta-sico have disulficide bridged inAking the cysteline residues at positions 38 and 57 to form a loop structure. The perfectes are used in workines to raise the human pitutiary luterinising homono, to control the biological activity of endogenous RiCs. These antibodies may be used in disquosite presented to rests to determine hormone levels of mammals. The peptides can be used in pregnancy tests and in detection of reduced fertility or infartility. They may also be administered for contraception or abortion processes to human so treas in hormone-associated carcinomas.
                                                                                                                                                                                                                                                                    Peptide analogues of beta-human chorionic gonadotrophin which are able to state antibodies against human chorionic gonadotrophin are used in vaccines as contraceptives and/or abortificants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human chorlonic gonadotrophin; HCG; contraception; abortion; the more related disorder; hormone-related carcinoma; cancer; diabetes; vascular disease; Zollinger-Ellison syndrome; chronic digestive disorder; antigenic modification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human chorionic gonadotrophin (HCG) beta-subunit (Structure I).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 99.1%; Score 770; DB 22; Length 145; Best Local Similarity 100.0%; Pred. No. 1.8e-62; Marches 140; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAU01139 standard; protein; 145 AA.
                                                                                                         (OHIS ) UNIV OHIO STATE RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 35; 214pp; English
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06-OCT-2000; 2000WO-US27741.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 145 AA;
                                                  06-OCT-1999;
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07-AUG-1992;
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                                                                                                                                                                  Stevens VC;
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AAU01139
ID AAU
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                                                                                                                                                                                            The invention relates to human single chain forms of the glycoprotein chromoge durated which is an agonist or antagonist of intelnising hormone conformed quarted which is an agonist or antagonist of intelnising hormone conformed conformed the conformed conformed the conformed conformed
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 99.1%; Score 770; DB 32; Length 145; Best Local Similarity 100.0%; Pred. No. 1.8e-62; Matches 140; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 SKEDLRPRGRIMMTLAVEREGEPCITVNYTTCAGYCPWTRVLGGVLPALPOVVCNYR 61
1 SKEDLRPRGRIMMTLAVEREGEVCITVNYTTCAGYCPWTRVLGGVLPALPOVVCNYR 60
                                           New DNA or RNA encoding single chain protein useful in treating infertility, as alds in vitro fertilization techniques, or other infertilite methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Beta-subunit of Human Chorionic Gonadotrophin (HCG).
                                                                                                                                                        Example 19; Column 103-106; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAU00709 standard; Protein; 145 AA.
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RESULT 7
AAU00709
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W0200110907-A2.

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The present sequence is given in a specification relating to the present polypeptides originally isolated from human early pregnancy utrine, now synthetically produced, as well as functional equivalents of these polypeptides. Novel beta-human chorionic gonadotrophin (hCG) fragments, designated Maternin (RTM) and referred to as MA and pMA peptides, are disclosed. Both native and synthetic MA Inhibited growth of human tumour cells inplanted into immuno deficited more by between 60 to 100%. Telative to control studies. The therapeutic MA polypeptides are disclosed for the prevention and treatment of a range of diseases and disorders, including human immunodeficiency virus (HTV) infections, disorders, including human immunodeficiency virus (HTV) infections, disorders (especially Kaposi's sarcoma), wasting disorders, hemantopoletic disorders (and anamoles), inflammation and angiogenic disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99.14; Score 770; DB 22; Length 145;
100.04; Pred. No. 1.8e-62;
Live 0; Mismatches 0; Indels 0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPIMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cells that produce therapeutic beta-human chorionic gonadotrophin fragments, useful for the treatment of human immunodeficiency virus infections, cancers, wasting disorders, hematopoletic disorders, inflammation and angiogenic disorders
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                                                                                                                                                                                                                                                                                                                                                                                     Gallo R, Bryant J, Lunardi-Iskandar Y, Powell R, Reitz M; Foulke J, Lewis G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Beta subunit of human chorionic gonadotropin (HCG).
                                                                                                                                                                                                                                                                                                               (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
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                                                                                                                                          05-AUG-2000; 2000WO-US21495.
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13-MAR-2000; 2000US-0188777.
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Best Local Similarity 100.0'
Matches 140; Conservative
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                                                                         15-FEB-2001.
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AABO4121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence represents the beta-subunit of human chorionic gonadorrophin (#GG). The #GC beta-subunit polypeptide sequence is condoctrophin (#GG). The #GC beta-subunit polypeptide sequence is considered to a carrier of the disulfide bridge infinity of the terminal cysteine amino acids of polyperides and beta set in a conjugated to a carrier. The #GC antigent considered to be used in a vaccine composition for providing an entitled response to #GG in a mammal. The novel #GC antigent considered are useful for the purpose of contraception, abortion.

Confiders interment of hormone-related disease states and to boost an animal's restance of hormone-saccited carcinomas, and to boost an Glassate integrate of disorders, treatment of hormone-saccited carcinomas, and to boost an Contraction peptides are also useful for treating accept dispetes. The world disease the disorders and contracting accepting a such as a structures of chronic dispetitive disorders. Also described are various structures of chronic dispetitive disorders. Also described are various structures contraction and public are non-antigento, non-endogenous materials in the body of the animals, with consequent reduced risk of demage to the immune system, if exposed to non-endogenous materials in the body of the animals.
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                                                                                                                                                                                                                                                                                                               Novel vaccine composition for provoking the formation of antibodies to human chortonic gonadorropin, contains a peptide comprising disulfide bridges linking terminal cysteine residues to form a loop
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99.18; Score 770; DB 22; Length 145;
Best Local Similarity 100.04, Pred. No. 18e-62;
Matches 140; Conservative 0; Mismatches 0; Indels
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AB71765;
XX
AB71765;
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X AB71765;
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X Beta-human chorionic gonadotrophin.
XX
AB71767;
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X AB71766;
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AB717766;
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AB717766
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Column 19; 82pp; English.
                                                                                                (OHIS ) UNIV OHIO STATE RES FOUND.
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04-DEC-1985; 85US-0804642.
17-AUG-1987; 87US-0086401.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 145 AA;
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The sequence is encoded by an analogue of hCG beta subunit cDNA contgrieve slient mutations which eliminate restriction sites, it was prepted from the plasmid pKMB hCG beta, a construct contgrieve hCG beta subunit isolated from hman plasmid pKHB of Goodman) in plasmid pKMB, a derivative of pUCIB designed for facilitate cloung of glycoprotein hormones. The sequence as used as the starting construct for many mutants, isee ARNISOB1-RISI25 and ARNISIB-1819.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLGGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human chorionic gonadotropin; RCG; thyroid stimulating hormone; Tast, thyroid cancer; hypothyroidism; Graves' disease; prognosis; diagnosis; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility as immuno-castration against, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match

Ouery Match

Best Local Similarity 100.0%; Pred. No. 2e-62;

Matches 140; Conservative 0; Mismarches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
1..20
//note- 'signal peptide'
21..165
/note- "mature protein"
Location/Qualifiers
1..20
/label= signal sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY05748 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 3; Fig 4a; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human chorionic gonadotropin.
                                                                                                                                                                                                                                                            90US-0520703.
                                                                                                                                                                                                        91WO-US03162.
                                                                                                                                                                                                                                                                                                             (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1991-353528/48.
N-PSDB; AAQ14800.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165 AA;
                                                                                                                                                                                                        07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                         08-MAY-1990;
                                                                                                    W09116922-A.
                                                                                                                                                    14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY05748;
   Key
Peptide
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Peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAYOS746
TAAYOS746
AAYOS746
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Immuniting selected mammalian species with antigenically modified peptides for the production of polyclonal antibodies for contraception, abortion or treatment of hormone-related disease states such as cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The administration of a polypeptide determinant of a reproductive hormone such as human chorionic gondocropin (GG) can be used to produce non-immunogent polyclocal antibodies (Ab) specific to that hormone. This process is useful for contraception, abortion and for treating hormone related disease states and disorders such as hormone-associated carcinomas. The polyclocal antibodies can also be used to boost an animals resistance to exogenous protein e.g. viral proteins. The method is safer to use and has less sorious side effects than the administration of steroids consisting of synthetic non-protein hormones, which were used conventionally.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
99.1%; Score 770; DB 22; Length 145;
Best Local Stmllarity 100.0%; Pred. No. 18e-62;
Matches 140; Conservative 0; Mismatches 0; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glycoprotein hormone; hCGB'; fertility; immuno-castration; immuno-contragestive; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human chorionic gonadotropin beta subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Column 18; 57pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR15043 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                  78US-0936876.
87US-0073748.
92US-031748.
92US-0311331.
73US-035892.
73US-0406821.
74US-042952.
75US-0622031.
81US-0112628.
                                                                     95US-0466660.
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                                                                                                                                                                                                                                                                                                                                                                                                          (OHIS ) UNIV OHIO STATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-040423/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 145 AA;
                                                                                                                  25-AUG-1978;
15-JUL-1987;
26-AUG-1992;
17-FEB-1992;
07-MAY-1973;
16-OCT-1973;
14-OCT-1975;
16-JUL-1981;
20-NOV-1981;
                                                                     06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                 14-NOV-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stevens VC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15043;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR1504:
ID AAR1504:
IX AAC AAI
XX AAC AAI
XX AAC AAI
XX KW GL;
KW IM IM
XX COS HON
XX AAC AAI
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The invention relates to the production of analogues of a heterodimeric subunit giycoporcian hormone (GR9), e.g. human chorionic gonadotropin (hCG), human intensial promone (RF8), human intensial promone (RF8), human intensial promone (HE8), human follicle stimulating hormone (HE8), human intensial promone (HE8), and intentional matching, which are modified to contain an intersubunit disuphide bond, between an alpha-subunit cysteine and a beta-subunit opsteine, for certain proved stability, the analogue retaining at least a portion of the human continulation of the corresponding native GPH seeptor. This sequence to represents the wild type hCG-beta subunit used for the generation of the corresponding native GPH seeptor. This sequence to reduce perturbation of the 3-diamensional structure of the hormone, thereby creating greater likelihood that the diamer will be formed in vivo and the formed diamer will have affinity for the native receptors and have special activities of the hormones. The analogues can have uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRPQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNTR 61
11 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNTR 80
1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNTR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New stabilised glycoprotein hormones - particularly hCG hLH, hFSH or Instead an interpulbuit distubblide crosslink between the athbha - and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 99.18, Score 770; DB 20; Length 165; Best Local Similarity 100.04; Pred. No. 2e-62; Metches 140; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; chorionic gonadotrophin; hCG; DNA vaccine; cancer; fertility control; contraceptive; immunogen.
    stability; primer; amplification; PCR; mutation
                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human chorionic gonadotrophin beta-subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Fig 4A; 139pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB15358 standard; protein; 165 AA
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                                                                                                                                                                                                                                                                                                                                                                             97US-0050784.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-081219/07.
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                                                                                                                                                                                                                                                                                                        25-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                        25-JUN-1997;
                                                                                                                                                    W09858957-A2.
                                                                                                                                                                                                                              30-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAB15358;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence represents human chorionic gonadotropin (CG). The invention is based upon the discovery that mutent the invention is based upon the discovery that mutent the full of the invention is based upon the discovery that mutent the man by propredict in bornone common alpha subunit (see ANYOSTAG) and mutent human thyroid stimulating hormone (TSB) beta subunit (see ANYOSTAY), each comprising amino acid substitutions relative to the vild type sequences, can be produced and absembled to form mutent TSH heterodems relative to the vild type sequences, can be produced and assembled to form mutent TSH heterodems comprises the TSH beta in once mabodiment, a mutent TSH heterodian comprises the TSH beta subunit joined via a peptide bond at its C-terminus to the subunit joined via a peptide bond at its C-terminus to the subunit joined via a peptide bond at its C-terminus to the subunit joined via a peptide bond at its C-terminus to the subunit joined via a peptide bond at its C-terminus to the subunit joined via a peptide bond at its C-terminus to the subunit joined via a peptide bond at its C-terminus to the antibodies and analogues are treating or disorder characterised by the presence of creating for a disorder characterised by the presence of creating for a disorder characterised by the presence of creating cor a disorder characterised by the presence of characterised and analogues and also be used for the targeted delivery of the TSH beterodiants can also be used for the targeted delivery of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; hTSH; htwan torforfontc gonaddroppin; human luceinfsing hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels 0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New thyroid stimulating hormone mutants with increased bloactivity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match
99.14; Score 770; DB 20; Length 165;
Best Local Similarity 100.04, Pred, Wo. 2e-62;
Matches 140; Conservative 0; Mismatches 0; Indels
134..165
/note= "C-terminal extension peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human chorionic gonadotrophin beta subunit hCG-beta'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW99533 standard; Protein; 165 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                          (UYMA-) UNIV MARYLAND BALTIMORE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Szkudlinski MW, Weintraub BD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                22-SEP-1997; 97US-0939472.
                                                                                                                                                                                                                                                           98WO-US19772.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-254714/21.
N-PSDB; AAX25387.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 165 AA;
                                                                                                       W09915665-A2.
                                                                                                                                                                                                                                                           22-SEP-1998;
                                                                                                                                                                                 01-APR-1999.
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Peptide
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0; Gaps

17-MAY-1999;

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The present invention provides the sequences of several immunogenic epitopes and antibodies to human chorionic gonadotrophin (hGD). These can be used in the treatment of cancers where hGG synthesis occurs. Including badder, parcreatic, cervical, colorectal, iung, osesphageai, breast, adding gastric, prostate, oratio, uterine and endometrial cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Methods for producing heterodimers, particularly analogues of hormones,
                                                                                                                    Human, anti-human chorionic gonadotropin (hCG) monoclonal antibody immunoreactive with a 2imer N-terminal fragment of C-terminal 37 subunits of hCG beta subunit, used to treat cancer along with vaccine comprising hCG groups
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 SKEPLRPRCRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLOGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                              99.1%; Score 770; DB 22; Length 165; 100.0%; Pred. No. 2e-62; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HCG beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                           Disclosure; Fig 1; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY43298 standard; Protein; 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-US08018.
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(AVIB-) AVI BIOPHARMA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.0°
Matches 140; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-620431/53.
                                                                                 WPI; 2001-025010/03.
                                                                                                                                                                                                                                                                                                                                                                                        Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09953065-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-0CT-1999.
                                        Iversen PL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY43298;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence comprises the human chorionic gonadotrophin (hCG) beta-submit. Fragments of the protein were used in the methods of the the fuvention which involve the use of DNA vaccines encoding hCG antigens to induce an immune response and enable the treatment of cancer and provide a novel method of fertility control. In particular, they can be used to treat colorectal, breast and lung cancer, as hCG is associated with these types of tumours.
                                                                                                                                                                                                                                                                                                                         Inducing immune response to human chorionic gonadotropin (bCG), useful for treatment of cancer and fettility control comprises exposing cells to nucleic acid construct encoding hCG immunogenic epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match

99.14; Score 770; DB 21; Length 165;
Best Local Similarity 100.04; Pred, No. 2e-62;
Makerches 140; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; chorionic gonadotrophin; hCG; cancer; vaccine;
Immunogenic epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human chorlonic gonadotrophin hCG.
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AAB49896
ID AAB49896 standard; protein; 165
                                                                                                                                                                                                                                                                                                                                                                                                        Claim 25; Fig 1A; 45pp; English.
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                                                                                                 99WO-US30232.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0134419
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                                                                                                                                                                               (AVIB-) AVI BIOPHARMA INC.
                                                                                                                                                                                                                                                           WPI; 2000-466124/40.
N-PSDB; AAA73833.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                165 AA;
                WO200041717-A2.
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                                                                                                                                       18-DEC-1998;
                                                                                              17-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                      20-JUL-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-NOV-2000.
                                                                                                                                                                                                                        Iversen PL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB49896;
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This sequence is a fusion protein of RCC and Jun. The invention cleares to a method of forming a cysteine knot protein (1) having alpha cleares to a method of forming a cysteine knot brotein (1) having alpha conditions are also and beta-subunits comprising attaching a dimerisation domain (DD) to either the N'termina of the harmonic soft in the case of the capture and to the C-terminus of the beta-subunit and to indicate the C-terminus of the beta-subunit and dimerising the products to form a heterodimeric protein analog (II). The method is customer, the conditions of the capture of a social set with excessive the caused by polycystic ovarian disease (associated with excessive sevenes of lutenisis in formone). Products that retain DD's are also useful as immunogenes or antigens (since a DD may contraining highly antigenic almon acid sequences). Attachment of a DD (Which may be removed later) facilitates the formation of heterodimers, that have similar structures can allows the combination of subunities that vould other-target conditions and almonogenes of subunities that would other-target conditions and almonogenes. Retaining part of a glycoprotein hormone my be modified without loss of activity, and attachment of the DD reduces to committee. Heterodimers have longer circulation times in vivo than individual subunits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                              Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
99.18; Score 770; DB 20; Length 206;
Best Local Similarity 100.04, Pred. No. 2.5e-62;
Matches 140; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HCG beta subunit-Jun fusion protein sequence.
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                                                                                                                                                                                          Example 7; Fig 20; 73pp; English.
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    WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 206 AA;
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Synthetic.
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AX AX4329

AX AX432

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                                                                                                                                    This sequence is a fusion protein of HGG and Jun. The invention relates to a method of forming a cystein knot brotein (i) having alpha calculates to a method of forming a cystein knot brotein (i) having alpha and beta-subunits comprising attaching a dimerisation domain (DD) to either the Witermini of both subunits or the Witerminia of the charmania of the charmania of the charmania of the charmania of the beta-subunit and dimerising the products to form a heterodimeric protein analog (II). The method is considered to products a form a heterodimeric protein analog (II) and method is considered by polycystic ovarian disease (associated with excessive facilitates the formation of heterodimers, that have similar structures cannon acid asquences). Attachment of a DD (which may be removed later) facilitates the formation of heterodimers, that have similar structures and allows the combination of subunits that would otherwise combine and and and the without loss of subunits, and attachment of the DD reduces be maddified without loss of activity, and attachment of the DD reduces of the condition than abunits.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RCG beta subunit-Jun fusion protein sequence.
from subunits of cysteine knot proteins -
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1D AAX 4303

XX AX AX 43303;

XX AX AX 43303;

XX AY 43303;

XX AY Cystein entry)

B RCC beta subunit.Jun fusion protein see

XX AY Cysteine knot protein formatic

KM Peta subunit; therapy; Jun.

XM WO993065-A1.

XM WO993065-A1.
                                                                         Example 7; Fig 20; 73pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  203 AA;
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ð 셤 ò 음

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This sequence represents a fusion protein of the human chorionic conditions of forces between the fuserion relates to a method of forming a cyteine knot protein (1) having alpha and method of forming a cyteine knot protein (1) having alpha and method of forming a cyteine knot protein (1) having alpha and method of forming a cyteine knot protein (1) having alpha and method of forces bubbints of the N-terminu of the alpha-subunit and the cytein (10) to either the N-terminu of both subunits or the N-terminus of the alpha-subunit and the cytein (1) the method is used to produce analogues (agonists or antagonists) of deglycosylated gyproprotein cannones, potentially useful, e.g. for treating infertility where caused by polycystic ovarian disease (associated with excessive levels of intendising hormone). Products that retain Do's are also useful as intending and intendising highly antigenic amino acid sequences). Attachment of a Do (which may be removed later) and thus receptor-binding and immunogenic properties) to native dimers, and thus receptor-binding and immunogenic properties) to native dimers, and thus receptor-binding and immunogenic properties combine poorly, or not at all The N-terminal part of a glycoprotein expective which and individual subunits.
                                                                                                                                                                                                                                                             Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      128 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Watch
Q9.11; Score 770; DB 20; Length 212;
Best Local Similarity 100.04; Pred. vo. 2.6-6-6;
Matches 140; Conservative 0; Mismacches 0; Indels
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                                                             (UYNE-) UNIV NEW JERSEY.
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14-APR-1998;
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    #X#X#X#X#X##X8
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                                                                                                                                                                                                                                                                                                             This sequence is a fusion protein of HGG and Jun. The invention are relates to a method of forming a cysteine knote protein (i) having alpha and beta-subunits comprising a testeine knote protein (ii) having alpha and beta-subunits comprising attaching a dimerisation domain (DD) to either the Writermini of both subunits or the Writerminia of the both subunits of the beta-subunit and interest of the C-terminus of the beta-subunit and indirection and the control of the C-terminus of the beta-subunit and interising the percentage to produce analogues (sgonists or antagonists) of deglycosylated glycoprotein hormones, potentially useful, e.g. for treeting infertility where caused by polygystic ovarian disease (associated with excessive them the formation of stakes a Do may containing highly antigenic animon acid sequences). Attachment of a DD may containing highly antigenic cannot acid and public states and of heteroflamers, that have similar structures and allows the combination of subunits that would otherwise combiners, on a allows the combination of subunits that would otherwise combiners, be modified without loss of activity, and attachment of the DD reduces by formation of homodimers have longer circulation times in vivo than individual subunits.
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                                                                                                                                                             Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 99.11; Score 770; DB 20; Length 209; Best Local Similarity 100.04; Fred. No. 2.66-52; Marches 140; Conservative 0; Mismarches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human CG beta subunit-Jun fusion protein sequence.
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                                                                                                                                                                                                                                                    Example 7; Flg 20; 73pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US08018.
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                                                                                       WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     209 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W09953065-A1.
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AAX43278
LD AAX43278
AC AAX432
XX 19-JAA
XX 19-JAA
XX W Cystel
KW Cystel
KW
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05-JUN-2001.

21-0CT-1999.

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The sequence represents the amino acid sequence of single chain goadortopin had analogue 11. The givocoptein homomoe analogue 13. The givocoptein homomoe analogue 14. The givocoptein homomoe analogue 14. The givocoptein homomoe and the common of the treatment of infertility, as an aid for in vivo fertilisation techniques, and in other therapeutic methods associated with the native commone. The single chain protein is further useful as a reagent in a manner similar to the herapeodimer, as a diagnostic tool to detect the commoner similar too the herapeodimer, as a diagnostic tool to detect the bottopical samples, as a control reagent in assay kits for assessing the bological samples, as a control reagent in assay kits for assessing the complexes of these hormones in various samples, and in detecting and puritying receptors to which the native hormones blund 'the single chain common of the heteroclamers or homodimers have the following advantages over their diamer; forms; they are more stable, problams of recombinant commons and analogue of the heteroclamers or homodimers have the following advantages over their diamer; forms they are made since only a single gene is needed to transcribe, truning of activity pleased since only a single gene is needed to transcribe, truning of activity presents and of in vivo half lives. Single chain forms are unique starting macerials for identifying truncated forms with the acceptance of the process, proved and the submitte permitts the process in the process of the process
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99.1%; Score 770; DB 22; Length 265;
100.0%; Pred. No. 3.3e-62;
Live 0; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 SKEPLRPRCRPINATLAVEKEGCPYCITVNTTICAGYCPTMTRVLQGVLPALPQVYCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 22
AAUO4614
ID ANUO4614 standard; Protein; 265 AA.
X AAUO4614;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 5; Fig 5; 86pp; English.
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                                                                                                                                                                                                    94US-0289396.
94US-0310590.
94US-0334628.
94US-0351591.
95US-0475049.
97US-0853524.
      99US-0282357
                                                                                                     97US-0918288
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Best Local Similarity 100.0
Matches 140; Conservative
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N-PSDB; AAS08485.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Boime I, Moyle WR;
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                                                                                                                                                                                                                                                                                             04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
31-MAR-1999;
                                                                                                     25-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This sequence is a fusion protein of HGG and Jun. The invention relates to a method of forming a cysteine knot protein (1) having alpha and relates to a method of forming a cysteine knot protein (1) having alpha and beta-subunits comprising attaching a dimerisation domain (DD) to either the N-termina of both subunits or the N-termina of the call that the N-termina of the beta-subunit and dimerising the products to form a heterodimeric protein naming of the method is to produce analogues (spoinss or a magnists) of dealyrosylated superporterin homones, potentially useful, e.g. for treating infertility useful as immunogens or antigens (since a DD may containing highly antigenic as inmunogens or antigens (since a DD may containing highly antigenic anino acid sequences). Attachment of a DD (which may be removed later) facilitates the formation of heterodimers, that have similar structures and lows the combination of subunits that would otherwise combines. On the allows the combination of subunits that would otherwise combines. Depoily, or not at all The N-terminal part of a glycoprotein hormone may be conditied without loss of activity, and attachment of the DD reduces to vivo than individual subunits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; glycoprotein hormone; infertility; in vivo fertilisation;
single chain gonadotropin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Single chain gonadotropin analogue #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 7; Fig 20; 73pp; English.
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99WO-US08018.
                                                                                        98US-0059625.
                                                                                                                                                                                        (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-620431/53.
                                                                                        14-APR-1998;
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The invention relates to human single chain forms of the glycoprotein hormone quarter which is an agonist or attaconist of luteinising hormone [LH], follicle stimulating hormone [FSH], thyroid stimulating hormone [FSH], thyroid stimulating hormone [FSH], thyroid stimulating hormone having identical alpha subunits and differing beta subunits. The agonist forms of single chain hormones are used in treating infertility, as aids associated with the native hormones, and other therspectic methods associated with the native hormones. The single chain hormones are useful detect the presence of antibodies with respect to the native proteins in biological samples, as control reagents in assay kits for assessing the
                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
21.165
70.166
700te "Corresponds to 1-145 amino acids of human charlonic gonadotropin (CG) beta-subunit"
166.117
Anote "Linker peptide"
174.265
70te "Corresponds to 1-92 amino acids of human single chain gonadotropin alpha-subunit"
                                                                                                                                                                                                                                                                      Human; single chain gonadotropin analog no:1; anti-infertility; drug; peptide therapy; lutenfainsing hormone; LH; follicle stimulating hormone; FSB; thyroid stimulating hormone; TSB; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein.
81 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                            Human single chain gonadotropin analog no:1.
                                                                                                                                             AAE04474 standard; Protein; 265 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 9; Fig 5; 87pp; English.
                              94US-0199382.
94US-0289396.
94US-0310590.
94US-0334628.
94US-0351591.
97US-0853524.
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                                                                                                                                                                                                            04-SEP-2001 (first entry)
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N-PSDB; AAD08785.
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                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US6238890-B1.
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                                                                                                                                                                           AAE04474;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Region
                                                                                                                                                                                                                                                                                                                                                                                                        Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Region
                                                                                                                RESULT 23
                                                                                                                                                                               The sequence represents the amino acid sequence of single chain good after The juyopotcein hormone analogue 18.

Good and corporate 18.

Good and corporate in The juyopotcein hormone analogue is considerable analogue 18.

CC useful for generating antibodies specifically immunoreactive with new compounds, as a substitute for the heterodiment of the promones, in the treatment of infertility, as an aid for in vivo fertilisation techniques, and in other therapeutic methods associated with the native hormone. The single chain protein is further useful as a reagent in a manner similar to the hatrodimer, as a disquestic tool to detect the commone. The single chain protein is further useful as a reagent in a manner similar to the heterodimer, as a disquestic tool to detect the blood can another a control reagent in assay lits for assessing the composition of an another proteins in the party of presence of antibodies with respect to the native proteins in the control of an another production as not only a sample, and in detecting and process, provide an afternate form thus permitting fine translate and process, provide an afternate form thus permitting fine culling of activity levels and of in "vivo half lives. Single chain forms care unique starting materials for identifying truncated forms with the catching to be engineered without disturbing the overall folding of the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating ifertility, or as aids for in vivo fertilization techniques
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
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                                                                       Human; glycoprotein hormone: infertility; in vivo fertilisation; single chain gonadotropin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match
Best Local Similarity 100.0%; Pred. No. 3.3-6-6.
Matches 140; Conservative 0; Mismatches 0; Indels C
                                           Single chain gonadotropin analogue #la.
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                                                                                                                                                                                                                                                       970S-0918288.
94US-0199382.
94US-0289396.
94US-031628.
94US-0351591.
95US-0475049.
                                                                                                                                                                                                                           99US-0282357
             23-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                      (UNIW ) UNIV WASHINGTON
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N-PSDB; AAS08509.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 265 AA;
                                                                                                                                                                                                                                                     25 - AUG - 1997;
18 - PEB - 1994;
12 - SEP - 1994;
22 - SEP - 1994;
04 - NOV - 1994;
07 - JUN - 1995;
09 - MAX - 1997;
                                                                                                                           Homo sapiens.
                                                                                                                                                          US6242580-B1.
                                                                                                                                                                                                                         31-MAR-1999;
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62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPRF0DSSS 121

1 SKEPLRPRCRPINATIAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 80

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The invention relates to human single chain forms of the glycoprotein champed quarter which is an aponiato or antagonist of intensinising hormone componence (HJ), follicle stimulating hormone (FJ), follicle stimulating hormones are heterodimers having identical alpha subunits and differing beta subunits. The aponiat corresponds in the control of subunits, the aponiation of single chain hormones are used in a vitro fertilisation techniques, and other therapeutic methods associated with the native hormones. The single chain hormones are useful as receptoral samples, as control respents in assay kits for assessing the levels of these hormones in various samples, in detecting and purifying ceeptors to which the native hormones blud. The single chain hormones are also used in affairly chromatographic preparation of receptors or celeptors to which the native hormones blud. The single chain moments can easily considered as purification tools for celeptors to which the native hormones abunitatered as a fungs. The single chain moments of single chain hormones administered as a fungs. The single chain of subsequent preparations of these materials and to monitor (evels of single chain hormones administered as a fungs. The single chain of subsequent to operate antibodies specifically immunoractive (hormones. The present sequence is human single chain gonadorropin analogence of hormones. The present sequence is human single chain gonadorropin and consider the parting of human chorlonic gonadorropin and single chain gonadorropin and consider template directed vaccine design and for the development of hormone-specific vaccines for use in humans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other infertpetulic methods associated with the native hormones
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Best Local Similarity 100.0%; Pred. No. 3.3e-62;
Matches 140; Conservative 0; Mismatches 0;
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AAV13286 AAV13285 Standard; Protein; 273 AA.
XX AAV13285;
AC AAV43285;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 9; Fig 17; 87pp; English
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94US-0289396.
94US-0310590.
94US-034628.
94US-034628.
95US-0475049.
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N-PSDB; AAD08809.
                                                                                                                                                                                                                                                   Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 265 AA;
            18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
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levels of these hormones in various samples, in detecting and purifying receptors to which the native hormones bind. The single chain hormones con articles are also used in affinity chromatographic proparation of receptors or antibhormone antibodies. They are used as purification tools for continuous of subsequent preparations of these materials and to monitor of stopporteins are used to generate antibodies specifically immunorative vith these new compounds, as substitutes for the heterodimeric forms of hormones. The present sequence is human single chain analog cof human choical control gonadorropin (CS) beta subunit (1-18 annio acids) cof human single chain gonadotropin analog cof human choicale chain gonadotropin analog cof human single chain gonadotropin subunit (1-18 annio acids) by a linker sequence. This analog serves as a useful starting compound for use in humans.
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11.165

Anote—"Corresponds to 1-145 amino acids of human chorlonic gonadorropin (CG) beta-subunit.

166.173

Anote—"Linker peptide"

174. 265

Anote—"Corresponds to 1-92 amino acids of human single chart gonadotropin alpha-subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; single chain gonadotropin analog no:la; anti-infertility; drug; peptide therapy; lutefailsing hormone; Lif; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorlonic gonadotropin; CG; glycoprotein; infertility; fusion protein; mutant; mutein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTIDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 99.1%; Score 770; DB 22; Length 265; Best Local Similarity 100.0%; Pred. No. 3.38-67 index Matches 140; Conservative 0; Mismatches 0; Indexs 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note- "Wild type Asn substituted with Gln"
251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "Wild type Asn substituted with Gln"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human single chain gonadotropin analog no:la.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAE04486 standard; Protein; 265 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-091828B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                         Sequence 265 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAE04486;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Region
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Length 265; Indels

19-JAN-2000 (first entry)

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This sequence is a fusion protein of HCC and Jun. The invention claims acqueated to forming a cystelia knot brotein (i) having alpha calcless to a method of forming a cystelia knot brotein (ii) having alpha and beta-subunits comprising attaching a dimerisation domain (DD) to either the Nitermini of both subunits or the Niterminia of the calculation of the calculation of the calculation of the beta-subunit and dimerising the products to form a heterodimeric protein analog (ii). The method is the products to form a heterodimeric protein analog (ii). The method is considered to products analog (iii). The method is considered proportion for promones, potentially useful, e.g. for treating infertility of symmoses of altiques (since a DD may contraining highly antigenic as immunogens or altigens (since a DD may contraining highly antigenic anion acid sequences). Attachment of a DD (which may be removed later) facilitates the formation of heterodimers, that have shall ar structures (and thus receptor-binding and immunogenic properties) to native dimers, and allows the combination of subunits; that would otherwise combine conditied without loss of activity, and attachment of the DD reduces to formation of homodimers. Heterodimers have longer circulation times in vivo than individual subunits.
                                                                                                                                                                   Cysteine knot protein; protein formation; heterodimeric protein analog; deglycostylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 99.18; Score 770; DB 20; Length 273; Best Local Similarity 100.04, Pred. No. 3.4e-62; Matches 140; Conservative 0; Mismatches 0; Indels (
                                                                                                                     HCG beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 6; Fig 19; 73pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                    19-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-620431/53.
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                                                                                                                                                                                                                                                                                            Homo sapiens.
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                  21-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Moyle WR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This sequence is a fusion protein of hGG and Jun. The invention cleares to a method of forming a cysteine knot protein (1) having alpha cleares to a method of forming a cysteine knot protein (1) having alpha and beta-subunits comprising attaching a dimerisation domain (0D) to either the N-termino of both subunits or the N-terminos of the capture of the charmon of deglycopylated used to produce analogues (sponisses or antegonisses) of deglycopylated cyproprotein hormones, potentially useful, e.g. for treating infertility where caused by polycystic ovarian disease (associated with excessive contigens (since a Do may containing highly antigens cannon acid sequences). Attachment of a DD may containing highly antigens cannon acid asquences. Attachment of a DD (which may be removed later) and thus receptor-binding and immunogenic properties) to native dimers, and allows the combination of subunitas that would otherwise combines.

Can allow the combination of subunitas that would otherwise combines of subunitas that would otherwise combines.

Condition of homodimers have subunite that would otherwise combines and the combination of subunits that would otherwise combines.
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                                                                                     Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Watch 99.1%; Score 770; DB.20; Length 273; Best Local Similarity 100.0%; Pred Mov. 3.4e-62; Indels 0; Gaps Matches 140; Conservative 0; Mismatches 0; Indels 0; Gaps
                                       HCG beta subunit-Jun fusion protein sequence.
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AAY43292
ID AAY43292 standard; Protein; 273 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 6; Fig 18; 73pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0059625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 273 AA;
                                                                                                                                                                                                                                                                                                                                                                                     13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                   14-APR-1998;
                                                                                                                                                                                                                                                                                      WO9953065-A1.
                                                                                                                                                                                                                 Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                       21-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Moyle WR;
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99WO-US08018. 98US-0059625. ö

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AAW47473 standard; Protein; 165 AA.

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2 SKEPERPRCRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQCVLPALPQUVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human chorionic gonadotrophin peptide derivatives - are active in
inhibiting, e.g. HIV infection or replication, Raposi's Sarcoma or
lawle pro-laematopoletic activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence is the beta-chain of human chorionic gonadotrophin (beta-hCG), peptide derivatives of which are active in hibbiting, e.g. HY infection or replication or Raposl's arroma, or have pro-haematopoletic activity.
                                                                                                                                                                                                                                                                                     Beta-chain; human; chorionic gonadotrophin; beta-hCG; inhibition;
haman immunodeficiency virus; HLV; infection; replication;
Rapoal's astroma, haematopolesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 98.7%; Score 767; DB 19; Length 165; Best Local Similarity 99.3%; Pred. No. 3.8e-62. Metches 139; Conservative 1; Mismatches 0; Indels (
                                                                                                                                                                                                                                                 Human chorionic gonadotrophin beta-chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bryant J, Gallo RC, Lunardi-Iskandar Y;
                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
1..20
/label- sig_peptide
21..165
/label- mat_peptide
                                                                                                                                 AAW33639 standard; Protein; 165 AA.
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97WO-US11202.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             960S-0709948,
960S-0669681.
                                                                                                                                                                                                              26-JUN-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-076887/07.
N-PSDB; AAV04780.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24 -JUN-1997;
                                                                                                                                                                                                                                                                                                                                                               Homo saptens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W09749373-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-SEP-1996;
24-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-DEC-1997.
                                                                                                                                                                     AAW33639;
                                                                                                                                                                                                                                                                                                                                                                                                  Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide
                                                                                                                                                                                                                                  SXCCCCXSX1111XXBXXBXXBXXBXX111111XXSXXXBXXBX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This sequence represents the beta subunit of human chorionic gonadotropin which is used in a method for the treatment or prevention of disease, by increasing production of at least one type of hamatopoletic cell. A method is also described in which non-terminally differentiated hamanopoletic cells are treated in which non-terminally differentiated hamanopoletic cells are treated in vitro to increase proliferation them returned to the patient. The method is specified for treating human humanodeliciency virus (RIV) infection, diopathic fromadocytopaenia purpura, anaemia or neutropaenia, or subjects who have undergone chemotherapy or radiation freatmedt. Nore generally it can be used to them a wide range of conditions involving haematopoletic failure, (non-haematopoletic tumours, autoimmune disease and genetic disorders (using a haematopoletic cells, The in vitro method can also be used to expand haematopoletic cells for subsequent therapeutic use.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Beta-human chorionic gonadotropin; beta-hCG; hematopoiesic cell;
treatment; proliferation; human immunodeficiency virus; HIV; tumour;
idiopathic thrombcytopaenia purpura; anaemia; neutropaenia;
chemotherapy; radiation, autoimmune disease; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treating or preventing disease by increasing production of head-topicitic cells - using human chorionic gonadotrophn or its fragments or derivatives, in vivo or in vitro, e.g. in cases of HIV infection, anaemia etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98.74; Score 767; DB 19; Length 165;
llarity 99.34; Pred. No. 3.8e-62;
Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bryant J, Gallo RC, Lunardi-Iskandar Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
                                                                                                                                                                                                                                                                                                    Location/Qualiflers
1..20
/label- signal
21..165
/label- beta-hCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 7; Fig 4; 162pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97WO-US11209.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96US-0709924.
                                                                                           23-SEP-1998 (first entry)
                                                                                                                               Human beta-hCG protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1998-076906/07.
N-PSDB; AAV18517.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match
Best Local Similarity
Matches 139; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence, 165 AA;
                                                                                                                                                                                                                                                                   domo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                  W09749418-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-SEP-1996;
24-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-DEC-1997.
                                                        AAW47473;
                                                                                                                                                                                                                                                                                                         Key
Peptide
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Gaps

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The invention relates to the production of analogues of a heterodimeric subulit giyocoprotein hormone (GFB). 49, human chorionic gonadotrophin (CC (hCG), human lutefaliatip hormone (hCB), human intensialian pormone (hCB), human chorionic gonadotrophin (CC (hCG), human intensialian pormone (hCB), human chorionic actualiating hormone (hCB), and the chorionic hormone (hCB), and the chorionic decision of the contensial and the cont
                                                                                                                                                                                 Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH;
human choritonic gonadorrophis human luteinising hormone; disulphide bond;
human fOllicle stimulating hormone; human thyroid stimulating hormone;
stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 DVRPESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGFKDHPLTCDDPRPQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLOGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New stabilised glycoprotein hormones - particularly hCG, hLH, h
or hTSH, have an intersubunit disulphide crosslink between the
alpha and beta subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 98.6%; Score 766; DB 20; Length 145; Best Local Similarity 98.6%; Pred. No. 4.1e-62; Matches 138; Conservative 2; Mismitches 0; Indels (
                                                                                                                                           Human chorionic gonadotrophin beta subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P.G.
                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
9.90
23.72
23.72
26.110
34.88
38.57
93.100
AAW99530 standard; Protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98WO-US13070.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97US-0050784.
                                                                                           08-JUN-1999 (first entry)
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Disulfide-bond
Disulfide-bond
Disulfide-bond
Disulfide-bond
Disulfide-bond
Disulfide-bond
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                                                                                                                                                                                                                                                                                                            Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Treating or preventing wasting syndrome - by administration of human chorlonic gonadotropin, beta-hCG, peptides or derivatives of these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence is the beta-chain of human chorizonic gonadotrophin (beta-hC), peptide detrivatives of which can be used to treat or prevent a wasting syndrome associated with viral infection, e.g. human immunodeficiency syndrome virus infection, cancer, chronic cardiovascular disease, chemotherapy or radiation therapy.
                                                                                                                                                                                                                                                         Beta-chain; human; chorionic gonadotrophin; beta-hCG; treatment; prevention; wasting syndrome; viral infection; cancer; chronic cardiovascular disease; chemotherapy; radiation therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

98.79; Score £67; DB 19; Length 165;
Best Local Similarity 99.38; Pred, No. 3.8e-62,
Matches 199; Conservative 1; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYMA-) UNIV MARYLAND BIOTECHNOLOGY INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bryant J, Gallo RC, Lunardi-Iskandar Y;
                                                                                                                                                                                                                Human chorionic gonadotrophin beta-chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1..20
/label- sig_peptide
21..165
/label- mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                  AAW33637 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 8; Page 69; 126pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97WO-US11448.
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960S-0669675
                                                                                                                                                                 26-JUN-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-077106/07.
N-PSDB; AAV04779.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-SEP-1996;
24-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      W09749721-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-DEC-1997.
                                                                                                                 AAW33637;
                                                                                                                                                                                                                                                                                                                                                                                                                              Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide
                      RESULT 29
AAW33637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 30
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The invention provides movel vaccine compositions which comprise the beta-subunit of human chorionic gonadotropin (betahcofi) in combination with chitcosin-based adjuvants. The vaccines are used to induce infertility especially translent infertility, in female mammals. The compositions are also used for antibody production. The vaccines comprise a well-tolerated chitcosin-based adjuvant which induces the production of anti-chorionic gonadotroph antibodies, without inducing the side effects (e.g. hypersensitylty, rethman, etc.) associated with other adjuvants. The vaccine also overcomes the problem of non-responsiveness in some individuals. The present sequence respectants betahck/beta-gal fusion protein consisting of leaderless betahcG linked to a beta-gal fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel human beta-subunit chorionic gonadotropin vaccines used to integrupe fertility in mammals by the immunological inactivation of the pregnancy hormone chorionic gonadotropin
0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human chorionic gonadotropin; hCG; betahCG; vaccine; chitosan; infertility; betahCG/beta-gal; fusion protein.
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                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 32
ANY 7315:
ANY 7316:
ANY 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human betahCG/beta-gal fusion protein.
                                                                                                                                                                                  122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               123 KAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human-chortonic gonadotropin; human luteinising hormone; disulphide bond; human follicle stimulating hormone; human ityroid stimulating hormone; stability; primer; amplification; PCR; mutation
61 DVRFESIRLPGCPRGVNPVVSYAVAISCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DGGETY MAICH 98 64; Score 766; DB 20; Length 165; Boat Local Smilarity 99.34; Pred. Nov. 16e-67; Indels 0; Gaps Maiches 139; Conservative 0; Mismaches 1; Indels 0; Gaps Maiches 139; Conservative 0; Mismaches 1; Conservative 0; Caps Maiches 139; Conservative 0; Caps Maiches 130; Caps Maic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New stabilised alycoprotein hormones - particularly hCG, hLR, hFSH or hFSH, have an intersubunit disulphide crosslink between the ather and beta subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Glycoprotein hormone analogue hCG-beta-A35C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISTE ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
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                                                                                                                                                                                                                                                                                                                                                                           AAM99508
ID AAM99508 standard; Protein; 165 AA.
XX
                                                                                      122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                             121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-JUN-1998; 98WO-US13070.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-JUN-1999 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo saplens.
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW99508;
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146 KAPPPSLPSPSRLPGPSDT 164

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61 DVRFESIRLPGCPRGVNPVVSYAVALSCMCALCRRSTTDCGGPKDHPLTCDDPRFQDSS 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequence is an analogue of mature hCG beta subunit having residute 89 replaced by a methonine residue. This introduces an additional cleavage site for CWBF, useful for determining the disulphide bonds. This can be used to show that mutagenesis has not altered the "normal" disulphide pettern of mandogues, and for examining protein folding.
                                                                                  Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           New glyco-protein hormone analogues - for inducing fertility as fimuno-costration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 98.5%; Score 765; DB 12; Length 145; Best Local Similarity 99.3%; Pred. No. Se-62; Mestches 139; Conservative 0; Mismatches 1; Indels Matches 139; Conservative 0; Mismatches 1
                                         hCG methionine substitution mutant, G3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hCG histidine substitution mutant, G5.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                     91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                    (UYNE-) UNIV MED NEW JERSEY.
11-FEB-1992 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                           Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 145 AA;
                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                  07-MAY-1991;
                                                                                                                                                                                                                                                                                           08-MAY-1990;
                                                                                                                                                                                                              14-NOV-1991.
                                                                                                                                                                     WO9116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR15173;
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AAR15173
ID AAR151
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention provides movel vaccine compositions which comprise the beta-subunit of human chorionic gonddorropin (betahcofin combination with chicksan-based adjuvants. The vaccines are used to induce infertility especially transient infertility, in female mammals. The compositions are also used for antibody production. The vaccines comprise a well-tolerated chicksan-based adjuvant which induces the production of an introduction of sand chicksantivity, erythma, etc.) associated with other adjuvants. The vaccine also overcomes the problem of non-responsiveness in some individuals. The present sequence represents a betahc's fragment fused to an alpha-mating factor leader sequence at the N-terminus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel human beta-subunit chorionic gonadotropin vaccines used to integrate fertility in mammals by the immunological inactivation of the pregnancy hormone chorionic gonadotropin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63 VRFSSIRLGGCRGVNPVVSTNALGCQCALCRRSTTDCGGFROHPLTCDDPRFQDSSSS 122
161 VRFSSIRLGGCPRGVPVSTNALGCGALCRRSTTDCGGFROHPLTCDDPRFQDSSSS 220
161 VRFSSIRLGGCPRGVNPVSTNALGCGALCRRSTTDCGGFROHPLTCDDPRFQDSSSS 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                        Human chorionic gonadotropin; hCG; betahCG; vaccine; chitosan;
infertility; betahCG/beta-gal; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match

98.6%; Score 766; DB 21; Length 252;
Best Local Similarity 100.0%; Pred Amo, 7.2e-62,
Matches 139; Conservative 0, Mishatches 0; Indels

Matches 139; Conservative 0, Mishatches 0;
                                                                                                                                                            Alpha-mating factor fragment/betahCG fusion protein.
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AAR15171
ID AAR15171 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 5; Page 34-35; 39pp; English.
                                      AAY57316 standard; Protein; 252 AA.
                                                                                                                                                                                                                                                                                                                                                                                              99WO-US21591.
                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0100766.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  221 KAPPPSLPSPSRLPGPSDT 239
                                                                                                                      19-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Harris J, Martinez M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-271258/23.
N-PSDB; AAZ90610.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ZONA-) ZONAGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                252 AA;
                                                                                                                                                                                                                                                                                                            WO200015253-A1.
                                                                                                                                                                                                                                                                                                                                                                                           16-SEP-1999;
                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                     23-MAR-2000.
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                                                                                  AAY57316;
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ò a ò 음 (MCIN-) MCINNIS P G.

14-NOV-1991.

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the invention relates to the production of analogues of a heterodimeric subunit giyosoprotain hormone (GH9). A shame individuely gonadotrophin (CC (hCG), human intensial promone (HEH), human follicle stimulating hormone (HEH), human follicle stimulating hormone (HEH), human follicle stimulating connect (HEH), human follicle stimulating connect (HEH), which are modified to contain an intersubunit disuphide bond, between an alpha-subunit cysteine and a beta-subunit cysteine, for the containing at least a portion of the CC improved stability, the analogue retaining at least a portion of the Chiacativity for the corresponding native GHP receptor. This sequence containing a mutered hord-beta subunit used for the generation of the modified GHBs. The improved analogues are designed specifically to compense the protection of the 3-dimensional structure of the hormone, thereby creating greater likelihood that the dimer will be formed in vivo and the formed dimer will have affinity for the native receptors and have uses as for the native GHBs and prolong as for the native GHBs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Analogue; heterodimeric; glycoprotein hormone; hCG; hLB; hFSH; hTSH; human hortoric goradorrophi; human luteinising hormone; disulphide bond; human follicle stimulating hormone; human ftyroid stimulating hormone; stability; primer; amplification; PCR; mutation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Watch 98.5%, Score 765; DB 20; Length 165; Best Local Similarity 99.3%, Pred. No. 5.7e-62; Merches 139; Conservative 0; Mismatches 13; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New stabilised glycoprotein hormones - particularly hCG, hLM, hFSH or hTSH, neve an intersubult disturbhide crosslink between the other-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glycoprotein hormone analogue hCG-beta-V56C.
                                                                                                                                                                                                                                                                        Example 12; Page 89; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW99507 standard; Protein; 165 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141 SKAPPPSLPSPSRLPGPSDT 160
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                                                                                                       WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-JUN-1998;
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                                                   Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Analogue, heterodimeric; glycoprotein hormone, hCG; hLH; hFSH; hTSH; human chorionic gonadcrophi, human luteinising hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Owery Match
98.5%; Score 765; DB 12; Length 145;
Best Local Similarity 99.3%; Pred. No. 58-62;
Matches 139; Conservative 1; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The sequence is an analogue of mature hCG beta subunit having residue 37 replaced by a histidine residue. This introduces an additional cleavage site for CNBr, useful for determining the disulphide bonds. This can be used to show that mutagenesis has not altered the "ormal" disulphide pattern of analogues, and for seamining protein folding.
                                                                                                                                                                                                                                                                                                                                                  New qlyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Glycoprotein hormone analogue hCG4beta-V44C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Table VIII; Page 67; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW99514 standard; Protein; 165 AA.
                                                                     07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                    (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                             90US-0520703.
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                                                                                                                                                                                                                                    Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                              WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 145 AA;
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Synthetic.
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                                                                                                                             08-MAY-1990;
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AM995;
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The invention relates to the production of analogues of a heterodimeric subunit glycoprotein hormone (GRB) e.g. human chorionic gonadetropin (hGG), human luteinising hormone (HLM), human follicle stimulating conformating hormone (HLM), human follicle stimulating conformation (hGG), human investment of the stimulating hormone (HRSH), and functional muterins, which are modified to contain an intersubunit dissiphide bond, between an alphar subunit cysteine, for improved stablity, the analogue retaining at least a portion of the improved atablity, the corresponding native GPH this sequence represents a mutated hOC beta subunit used for the generation of the condified GPHs. The improved analogues are designed specifically to reduce perturbation of the 3-dimensional structure of the hormone, therefore dimer will be formed in vivo and the formed dimer will have affinity for the native receptors and have the biological activities of the hormones. The analogues can have uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 SKEPLRPRCRPINATLAVEKBGCPVCITVNTTCCAGYCPTWTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 SKEPLRPRERPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                 New stabilised glycoprotein hormones - particularly hCG, hLH, hPSH or integrable the an intergulbuit distubblide crosslink between the alpha- and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98.5%; Score 765; DB 20; Length 165; 99.3%; Pred. No. 5.7e-62; tive 0; Mismatches 1; Indels (
                                                         (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hCG methionine substitution mutant, Gl.
                                                                                                                                                                                                                                                                                                                             Example 12; Page 89; 139pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15169 standard; Protein; 145 AA.
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                      25-JUN-1997; 97US-0050784.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 99.39
Matches 139; Conservative
                                                                                                                                                                                        WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 165 AA;
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                                                                                                                                        Moyle WR;
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                                                                                                                                                                                                                                                                                                                   the invention relates to the production of analogues of a heterodimeric subunit giyosoprotein hormone (GPH) a.9. human chorionic gonadotropin (bCC), human intennising hormone (HBH), human follicle stimulating hormone (HBH), human fulcinistating hormone (HBH), human fulcinistating hormone (HBH), and functional cutteins, which are modified to contain an intersubunit disamphide bond, between an alpha-subunit cysteine and a beta-subunit cysteine, for the contains a minersubunit disamphide bond, cortains to the corresponding native GPH receptor. This sequence biological countries a material Angles retaining at least a portion of the modified GPHs. The improved analogues are designed specifically to complete the presents a material Angles and subunit used for the generation of the modified GPHs. The improved analogues are designed specifically to the reduce perturbation of the 3-dimensional structure of the hormone. The the formed dimer will have affinity for the native receptors and have against a cativity on them. The changes stabilise the GPHs and prolong as for the native GPHs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chortonic gonadotropin; human luteinising hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               es 119; Conservative 0; Mismatches 1; Indels 0; Gaps 2 SKEPLAPRCRPINATLAVEKEGCPVCITVWTTCAGCCPTWTRVLGCVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLOGVLPALPQVCCNYR 80
                                                                                                                                                                                 New stabilised glycoprotein hormones - particularly hCG, hLH, l
or hTSH, have an infersubunit (laiuphide crosslink between the
alpha and beta subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98.5%; Score 765; DB 20; Length 165; 99.3%; Pred. No. 5.7e-62; Live 0; Mismatches 1; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone analogue hCG-beta-I33C.
               (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                             Example 12; Page 89; 139pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141 SKAPPPSLPSPSRLPGPSDT 160
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 98.55
Best Local Similarity 99.35
Matches 139; Conservative
                                                                                                                                     WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 165 AA;
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Synthetic.
                                                                                        Moyle WR;
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chorlonic gonadotropin; hCG; hormone; glycoprotein; tumour; beta-subunit; starinies preperific; metalloprotease; binding assay; detection; prognosis; gonadotropin beta-subunit nicking enzyme; GBKE; phenanthroline; prognadotropin beta-subunit nicking enzyme; GBKE; phenanthroline; propeptin; cervical cancer; endometrial cancer; varian cancer; prostate cancer; cancer; tubal cancer; uterine cancer; vaginal cancer; vulvar cancer; reproductive cancer; therapy; screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                The sequence is that of the beta-subunit of human chorionic gonadorrophin which was used in the creation of a beta-subunit peptide analogue as part of an alpha, beta-heterodimeric polypeptide having an affinity to vertebrate intennising hormone [IR] receptors and vertebrate stimulating homone (FSR) receptors. This can be used for treating human infertility or polycystic ovarian disease.
                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                    1 SKEPLRPRCRPINATLAVEKEGCPVCITVNITICAGYCPTMTRVLQCVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                     2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
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/label- hcd
/note- *partial sequence of chorlonic gonadotropin
heta subunit*.
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                                                                                                                                                                                                                                                                          98.3%; Score 764; DB 14; Length 145; 99.3%; Pred. No. 6.2e-62; 1ve 0; Mismatches 1; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human chorionic gonadotropin beta subunit.
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                     Disclosure; Page 20; 98pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 41
AAM31200
ID AAW31200 standard; protein; 145 AA.
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                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 99.39
Matches 139; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-502335/46.
                                                                                                                                                                                                                                 Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (COLE/) COLE L A. (KARD/) KARDANA A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-FEB-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW31200;
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Protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hGG; glycoprotein hormone analogue; human infertility; LH; FSH;
lutelinising hormone receptor; follicle stimulating hormone receptor;
vertebrate; polycystic ovarian disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New alpha, beta-hetero:dimeric polypeptide derivs. - which blnd to truchising and folicies estimated phomone receptors, useful for controlling the ratio of FSH to LH activity
                                                                                                                                                                                                                                                                                       The sequence is an analogue of mature hCG beta subunit having residues 12 and 27 replaced by methonine residues. This introduces additional cleavage sites for CNBr, useful for decembing the disliphing bonds. This can be used to show that mutageness has not a liered the 'normal' disliphing by the mutageness, and for examining protein folding.
                                                                                                                                                New glyco-protein hormone analogues - for inducing fertility a
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Watch 98.31; Score 764; DB 12; Length 145; Best Local Similarity 98.64; Pred. No. 6.2e.63; Maches 189; Conservative · 2; Mismatches 0; Indels Matches 189; Conservative · 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human chorionic gonadotrophin beta-subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR30999 standard; protein; 145 AA.
                                                                                                                                                                                                                                              Table VIII; Page 67; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 SKAPPPSLPSPSRLPGPSDT 140
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               (UYNE-) UNIV MED NEW JERSEY
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                                                        Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Moyle WR;
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                                                                                                       WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 145 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09222568-A.
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The invention relates to the production of analogues of a heterodimeric subulit giycoprotein hormone (GFB) = 9. human chorionic gonadorropin (bCC), human lutefatian hormone (GFB), human thicatians bormone (HEB), human cloilicle stimulating bormone (HEB), human thicatians bormone (HEB), and incortional contents, which are modified to contain an intersubunit disuphide bond, between an alpha-subunit cysteins and a beta-subunit cysteins of the chimproved stability, the analogue retaining at least a portion of the chimproved stability, the analogue retaining at least a portion of the chimproved stability to compare the corresponding native GPH receptor. This sequence confided GPHs. The improved analogues are designed specifically to compare the corresponding and that the dimer will be formed in vivo and the formed dimer vill have affinity for the native receptors and have confident cattlivity on them. The champes stabilise the GPHs and prolong the bloogical activities of the hormones. The analogues can have uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Analogue; hèterodimeric; glycoprotein hormone; hCG; hLM; hFSH; hTSH; human choritonic gonadotropin; human luteinising hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 98.33; Score 764; DB 20; Length 165; Best Local Similarity 99:34; Pred. No. 7.1e-62; Matches 139; Conservative 0; Hismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glycoprotein hormone analogue hCG-beta-M41C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                        Example 12; Page 89; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW99506 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 165 AA;
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Synthetic.
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            This protein sequence represents the beta-subunit of human chorionic goadcorpoin (bGG) which can be used in a novel method for detecting conductive cancers and associated tumours. Not is a dimeric giptoductive cancers and associated tumours hot is a dimeric of jiptoprotein hormone whose beta-subunit is normally used as marker for reproductive tumours in both men and women. The hot beta-subunit can can sayinine specific metalloprotease copable of cleaved by gonadortopin beta-subunit nicking enzyme (GBNE) which is an arginine specific metalloprotease copable of cleaving the hot beta subunit at Arg44 or G1447, but is partially inhibited by phenathholine or temperation over 90 per cent of cancer patients show elevated levels of cleaving the hotse of general in the detection and promposis of cervical.

CC GBNE in thair blood, therefore, specific binding assays for the presence of GBNE are useful in the detection and promposis of cervical.

CC endometrial, ovarian, prostate, testicular, tubal uterine, vaginal or villar cancer GBNE can act marker for high risk screening test, the used to follow herapy for the treatment of known reproductive cancers:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 98.3%; Score 764; DB 18; Length 145; Best Local Similarity 98.6%; Pred. No. 6.2e-62; Indels Watches 138; Conservative 2; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLGCVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
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or hTSH, have an intersubunit disuiphide crosslink between the
alpha and beta subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glycoprotein hormone analogue hCG-beta-T42C.
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                                                                                                                                                                                                                                                                                                                                                                                                                    145 AA;
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Synthetic.
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AAW99512
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the invention relates to the production of analogues of a heterodimeric subunit giyosoprotein hormone (GRP) 4-9, human chorionic gondedtropin (CC (hCG), human lutefalsing hormone (HCB), human futefalsing hormone (HCB), human futefalsing hormone (HCB), human futefalsing hormone (HCB), and functional canteins, which are modified to contain an intersubunit disupplied bond, between an alpha-subunit cysteine and a beta subunit cysteine and contained bond, beta contracted analogue retaining at least a portion of the hormore and the former and the farmone and the corresponding an attack get segind specifically to complice perturbation of the 3-dimensional structure of the hormone. The teduce perturbation of the 3-dimensional structure of the hormone and the formed dimer will have affinity for the native ceptors and have a sponistic activity on them. The changes stabilise the GPHs and prolong the hologolous and have uses
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                  New stabilised glycoprotein hormones - particularly hCG, hLM, lor hTSF, have an interstubunit disiniphide crosslink between the alpha and beta-subunits to improve stability
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                                                                                                                                                                  Example 12; Page 89; 139pp; English.
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Synthetic.
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AAW99511
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                                                                                                                                         The invention relates to the production of analogues of a heterodimeric subunit giycoprotein hormone (GPH) a.9. Numan chorionic gondoutropin (CC (hCG), human luteinising hormone (HCH), human intentialing hormone (hCH), human intentialing hormone (hCH), human intentialing hormone (hCH), and functional contents, which are modified to contain an intersubunit disuphide bond, between an alpha-subunit cysteine and a beta-subunit cysteine of the bloadcativity for the corresponding native GPH receptor. This sequence contential a mitated hord-between the corresponding native GPH receptor. This sequence contential a mitated hord-beta subunit used for the agencian of the contential co
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
or hTSH, have an intersubunit disulphide crosslink between the alpha- and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 99.3%; Score 764; DB 20; Length 165; Peter Local Similarity 99.3%; Pred. No. 7.14-62; Matches 139; Conservative 0; Mismatches 1; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glycoprotein hormone analogue hCG-beta-T98C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                         Example 12; Page 89; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW99510 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98WO-US13070.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97US-0050784.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-081219/07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W09858957-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW99510;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Moyle WR;
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The sequence represents the amino acid sequence of gonadotropin analogue beta subunit lacking oligosaccharide binding sites. The oligosaccharide binding sites are removed in order to reduce the efficacy of the conditions sites are removed in order to reduce the efficacy of the conditions of the conditions of the sites of the oligosaccharide binding sites are removed in order to reduce the efficacy of the conditions of conditions analogue. Is useful for generating antibodies specifically immone analogue is useful for generating antibodies specifically commone analogue is useful for generating antibodies specifically control forms of the hormones, in the treatment of infertility, as an aid for in civiv fertilisation techniques, and in other therapeutic methods associated with the native hormone. The single chain procein is further useful as a reagent in a manner similar to the heterodimer of antive proteins in the bological samples, as a control reagent in assay (is the proteins in the bological samples, as a control reagent in assay of the single chain forms of the beteodimers or homodimers have the following advantages over their idmeric forms: they are more stable, concliowing advantages over their idmeric forms: they are more stable, concliowing advantages over their idmeric forms: they are more stable, concliowing advantages over their idmeric forms: they are more stable, is needed to transcribe, translate and process, they provide an alternate forms permitting fine tuning of sectivity levels and of in vivo half lives. Single chain forms are unique starting materials for identifying the cutility permitts the protein to be engineered without disturbing the cutility of correcting materials for identifying the control of the protein of the engineer of the suburity of the dimer. The linkage between the control of the protein to be engineered without disturbing the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; single chain gonadotropin analog; anti-infertility; drug; peptide therapy; luteiniaing hormone; LH; follicle stimulating hormone; ESH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; infertility.
                                                                                                                                                                                                                                                                      New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds in treating infertility, or as aids for in vivo fertilization techniques
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human single chain gonadotropin beta-subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                               Example 16; Fig 16; 86pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09;MAY-1997; 97US-0853524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-SEP-2001 (first entry)
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Best Local Similarity 99.31
Matches 139; Conservative
                                                            (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                 WPI; 2001-424301/45.
N-PSDB; AAS08507.
                                                                                                                        Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 181 AA;
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                                                                                                                                                                                                                                                              The invention relates to the production of analogues of a heterodimeric subunit giycoprotein hormone (GPH) a.g. human chorionic gonadorropin (hCG), human internising hormone (HEH), human follicle stimulating hormone (HEH), human follicle stimulating hormone (HEH), human follicle stimulating content of the content of the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels 0; Gaps
                                                                                    New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH or hMSH, have an intersubunit disulphide crosslink between the athbra - and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; glycoprotein hormone; infertility; in vivo fertilisation;
single chain gonadotropin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 98.3%; Score 764; DB 20; Length 165; Best Local Similarity 99.3%; Pred. No. 7.14-62. Matches 13; Conservative 0; Mismatches 1; Indels 0 Matches 12; Conservative 0; Matches 12; Indels 0
                                                                                                                                                                                                             Example 12; Page 89; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gonadotropin analogue, beta subunit<sub>i</sub>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141 SKAPPPSLPSPSRLPGPSDT 160
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9405-0199382.
9405-0289396.
9405-0316590.
9405-0351591.
9505-0475049.
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                        WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
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18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUN-2001.
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요 ò RESULT 4

0; Gaps

98.3%; Score 764; DB 22; Length 181; 99.3%; Pred. No. 7.8e-62; Live 0; Mismatches 1; Indels (

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141 SKAPPPSLPSPSRLPGPSDT 160

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62 DVRFESIRLPCCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRPQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence is an analogue of mature hCG beta subunit having residue 40 replaced by a histidine residue. This introduces an additional cleavage site for CNBr, useful for determining the distliphide bonds. This can be used to show that mutagenesis has even the "normal" disulphide pattern of analogues, and for see AARISO43, AARISO61-RISI2S and AARISO61-RISI98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                              Glycoprotein hormone; human chorlonic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 99.2%; Score 763; DB 12; Length 145; Best Local Similarity 99.3%; Pred: No. 7.6e-62; Matches 139; Conservative 0; Mismatches 1; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hCG methionine substitution mutant, G2.
                                                                                                                                                                               hCG histidine substitution mutant, G6.
                                              RESULT 48
AAR15174
ID AAR15174 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Table VIII; Page 67; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                               07-MAY-1991; 91WO-US03162.
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                                                                                                                                                11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                              08-MAY-1990;
                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                              W09116922-A.
                                                                                                                                                                                                                                                                                                                14-NOV-1991.
                                                                                                               AAR15174;
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ID AAR1
XX
AC AAR1
XX
AC AAR1
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DT 11-F
XX
DE hCG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to human single chain forms of the glycoprotein barmone quarter which is an agoist or antagonist of intensising hormone ([MI), follocis stimulating hormones are herefored merce forms of single chain hormones are used in transported the properties of subject that hormones are used in transported with the native hormones are used in transported with the native hormones are used in transported with the native hormones. The single chain hormones are useful as reaspents that manner stallar to betacolitars, as diagnostic tools to detect the presence of antibodies with respect to the native proteins in blood teal amples, as control respects to the native proteins to be a set also used in affinity chromatographic preparation of receptors or antibomens antibodies. They are used as furgitication tools for antibodies. They are used as furgitication tools for catalsous of subsequent preparations of these materials and to monitor levels of subsequent preparations of these materials and to monitor contitive these new compounds, as substitutes for the heterodimeric forms of beta-subunit coding region lawing as inhelitutes for the heterodimeric forms of the behavior of the subunit is queed for constructing fusion protein analogs are not an analogs serves as useful starting compounds for seepering expecitive forms to be the value of the present serves as useful starting compounds for sequence. This beta-subunit is used for constructing fusion protein analogs serves as useful starting compounds for sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                               be DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match

99.34; Score 764; DB 22; Length 191;
Best Local Similarity 99.34; Pred. NO. 7,8e-62;
Maches 139; Conservative 0; Mismarches 1; Indels (Matches 1); Conservative 0; Mismarches 1);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 16; Fig 16; 87pp; English.
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                                                                                                                                                           940S-0199382.
940S-0289396.
940S-0310590.
940S-031628.
940S-0351591.
950S-0475049.
                                                                                                                                97US-0918288
                                                                                                                                                                                                                                                                                                (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-366474/38.
N-PSDB; AAD08807.
                                                                                                                                                                                                                                                                                                                             Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 181 AA;
                                                                                                                                                           18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1995;
               Homo saplens.
Synthetic.
                                                              US6238890-B1.
                                                                                                                              25-AUG-1997;
                                                                                               29-MAY-2001.
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Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chorionic gonadorropin; human luteinising hormone; disulphide bond; human follicle stimulating hormone; human rhyrold stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 SKEPLRPCCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98.1%; Score 762; DB 20; Length 165; 99.3%; Pred. No. 1.1e-61; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Glycoprotein hormone analogue hCG-beta-Q46C.
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        98WO-US13070.
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Best Local Similarity 99.3
Matches 139; Conservative
        25-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The sequence is an analogue of mature hCG beta subunit having residue 37 replaced by anethonina residue. This introduces an additional cleavage size for CHBC, useful for determining the disulphide bonds. This can be used to show that mutagenesis has mot altered the 'normal' disulphide pattern of analogues, and for see AARISGA3. AMRIDGE-RISI2S and AARISIGI-RISI3B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New glyco-protein hormone analogues - for inducing fertility as immuno-eastration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
Glycoprotein hormone; human chorionic gonadotropin; disulphide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Table VIII; Page 67; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Campbell RK, Moyle WR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 145 AA;
                                                                                                                                                                                                                                                          07-MAY-1991;
                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                         08-MAY-1990;
                                                                                                                                                                                          14-NOV-1991.
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Synthetic.
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The invention relates to the production of analogues of a heterodimeric should it givenoprotein hormone (GFB). 9. human chorionic gonadotropin (DGC), human intentials promone (HEM), human follicle stimulating hormone (HEM), human follicle stimulating hormone (HEM), human follicle stimulating hormone (HEM), human follicle stimulating connected the content of the stimulating hormone (HEM), and functional matches, which are modified to contain an intersubunit disulphide bond, between an alpha-subunit cysteine and a beta subunit cysteine for the content of the chinacetylic of the corresponding native GPH receptor. This sequence confertivity for the corresponding native GPH receptor. This sequence conferting the matched management and season and the content of the 3-dimensional structure of the hormone thereby creating greater likelihood that the dimer will be formed in vivo and the formed dimer will have affinity for the native receptors and have agonistic activity on them. The changes stabilise the GPHs and prolong the native GPHs and prolong.
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or hTSH, have an infessbunkt disulphide crosslink between the
alpha and beta-subunits to improve stability
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99.11; Score 762; DB 20; Length 165;
Best Local Similarity 99.31; Pred. No. 1.1e-61.
Matches 139; Conservative 0; Mismarches 1; Indels (
                                                                                                                                                                                                                                                                                                      (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P.G.
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                                                                                                                                                              25-JUN-1998;
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                                                                                               30-DEC-1998.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       New stabilised glycoprotein hormones - particularly hCG, hLH, h
or hTSH, have an intersubunit disulphide crosslink between the
alpha- and beta-subunits to improve stability
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AAW99515 standard; Protein; 165 AA.
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                                                                                      25-JUN-1998;
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Synthetic.
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The invention relates to the production of analogues of a heterodimeric cobustic ground in the production of analogues of a heterodimeric cobustic glycoprofetin formone (GFM) = 0.9. human robriciont gonadoctropin (horizo), human luteinisty hormone (Hill), human follicle situaliting of concerned (hill), and functional muterins, which are modified to contain an intersubunit disulphide bond, between an alpha-subunit cysteine of the placetivity for the corresponding nettering at least a portion of the improved stability, the analogue retaining at least a portion of the corresponding nettering at least a portion of the represents a mutant hor-beta subunit used for the generation of the represents a mutant hor-beta subunit used for the generation of the reduce perturbation of the 3-dimensional structure of the hormone, thereby creating greater likelihood that the dimen vill be formed in vivo and the formed dimer will have affinity for the native receptors and have capulated activities of the hormones. The analogues can have uses
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97.9%; Score 761; DB 20; Length 165; 99.3%; Pred. No. 1.3e-61; tive 0; Mismatches 1; Indels (
stability; primer; amplification; PCR; mutation.
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Best Local Similarity 99.3%
Matches 139; Conservative
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                                              Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                             25-JUN-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to the production of analogues of a heterodimeric subunit giycoporcein hormone (GRB) a-9, human chorionic gondoctropin cubulit giycoporcein hormone (GRB), and man inteinialing hormone (RRB), human inteinialing hormone (HRB), human follicle stimulating hormone (HRB), and functional muteins, which are modified to contain an intersubunit disulphide bond, between an alpha subunit cysteine and a beta subunit cysteine, for between an alpha subunit cysteine and a beta subunit cysteine, for the corresponding at least a portion of the blanctivity for the corresponding native GPH receptor. This sequence the presents a mutant hGC beta subunit used for the generation of the creptored analogues red signed specifically to reduce perturbation of the 3-dimensional structure of the hormone, to reduce perturbation of the 3-dimensional structure of the hormone, the bridges are all likelihood that the dimer will be formed in vivo and the formed dimer will have affinity for the native receptors and prolong as for the native GPHS and prolong as for the native GPHS and prolong as for the native GPHS and prolong as for the native GPHS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chorionic gonadorropin; human luteinising hormone; disulphide bond; human folliche stimulating hormone; human thyroid stimulating hormone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New stabilised glycoprotein hormones - particularly hCG, hLH, ł
or hTSH, have an interstubunit disutphide crosslink between the
alpha and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 97.94; Score 761; DB 20; Length 165; Best Local Similarity 99.34; Pred. No. 1.3e-61; Metches 119; Conservative 0; Mismatches 1; Indels (
                                                                                                                                                                                                                                                                                          (ISTE ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Fig 4B; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hCG-beta analogue hCG-beta'-D99C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW99538 standard; Protein; 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                      98WO-US13070.
                                                                                                                                                                                                                                    25-JUN-1997; 97US-0050784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 165 AA;
                                                                                                                                                                               25-JUN-1998;
Homo sapiens.
Synthetic.
                                                                       W09858957-A2.
                                                                                                                                30-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                        Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW99538;
qq
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0; Gaps

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Analogue la (human CG-beta(1-145)-linker-human CG-alpha(1-92)[N530, N761) is a specific example of a single chain gondoctroph having at chorionic gondoctropin (CG) beta-subunit at the N-terminus and a CG alpha-subunit at the C-terminus, joined by a linker of 1-16 amino acids. The analogue la was derived from qualogue lby removing the two 91ycosylation sites from the alpha-subunit. The analogue has anti-luteinising hormone (lutropin) activity and can be used for secretion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                 Misc-difference 251
/note= "wild-type Asn at position 78 of the alphasubunit has been replaced by Gin to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                              /note- "wild-type Asn at position 52 of the alphasubunit has been replaced by Gln to remove a glycosylation site"
                               Single chain gonadotropin; human chorionic gonadotropin; hCG; alpha; beta; subunit; analogue; glycoprotein hormone; fertility; inhibit; stimulate; increase; lutropin; luteinising hormone; LH; follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of sirculating slyco-protein hormones having lutropin activity
  Partially deglycosylated single chain gonadotropin analogue la.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97.9%; Score 761; DB 16; Length 265;
99.3%; Pred. No. 2.1e-61;
Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                /note- "Arg corresponds to CCG codon"
166.173
Abbal- linker
174..365
/label- Gonadotropin_alpha_subunit_(1-92)
                                                                                                                                                                                         21..165
//abel- hCG_beta_subunit_(1-145)
                                                                                                                                     Location/Qualifiers
1..20
/label= leader
21..165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 23; Fig 18; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95WO-US02067.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94US-0199382.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 97.9
Best Local Similarity 99.3
Matches 139; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1995-302553/39.
N-PSDB; AAT03243.
                                                                                                                                                                                                                                                                                                                 Misc-difference 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SENS-) SENSI-TEST.
                                                                                                                                                                                                                        Misc-difference 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 265 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    W09522340-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-AUG-1995.
                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Moyle WR;
                                                                                                                                           Key
Peptide
                                                                                                                                                                                                                                                                                Region
                                                                                                                                                                                         Region
                                                                                                                                                                                                                                                     Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81 DVRFESIRLAGCPRGVNPVVSTAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Analogue 1 (human CG-beta(1-145)-linker-human CG-alpha(1-92)) is a specific example of a single chain gonadorrophn having a chorionic gonadorrophn (CG) beta subunit at the N-terminus and a CG alpha-subunit at the C-terminus, joined by a linker of 1-16 amino acids. The analogue has luteinishing hormone (lutropin) activity and is useful for inducing ovulation and increasing male fertility.
piphs; beta; subunit; analogue; gjycoprotein hormone; fertility; inhibit; stimulate; increase; lutropin; lutedinising hormone; LH; folilcle stimulating hormone; FSH; waccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             wethods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating slyco-protein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97.9%; Score 761; DB 16; Length 265;
99.3%; Pred. No. 2.1e-61;
Live 0; Mismatches 1; Indels
                                                                                                                                                                                  //note. *Arg corresponds to CCG codon*
166.17
Abbel-11inker
//abel-60nadotropin_alpha_subunit_(1-92)
                                                                                               1..20
/label= leader
21..165
/label= hCG_beta_subunit_(1-145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 12 and Claim 39; Fig 6; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95WO-US02067.
                                                                                                                                                                                                                                                                                                                                                                          94US-0199382.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 99.31
Matches 139; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1995-302553/39.
N-PSDB; AAT03212.
                                                                                                                                                                                                                                                                                                                                                                                                     (SENS-) SENSI-TEST.
                                                                                                                                                                      Misc-difference
                                                                                                                                                                                                                                                                              W09522340-A1.
                                                                                                                                                                                                                                                                                                                                          17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                       18-FEB-1994;
                                                                                                                                                                                                                                                                                                           24-AUG-1995.
                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                         Key
Peptide
                                                                                                                                         Region
                                                                                                                                                                                                   Region
                                                                                                                                                                                                                                  Region
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The sequence is an analogue of mature hCG beta subunit having residues 95 and 97 replaced by the corresponding residues in the bovine LM protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, agonist and/or antseed and may also have applications as an immunogen, agonist and/or antseed and may also have applications as an immunogen, agonist and/or antseed and may also have applications and manifecture and may applicate and manifecture and may applicate and manifecture an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragastive vaccines.
                                                                                                                  Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luteinising hormone; LH; CG; bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glycoprotein hormone; immino-castration;
Immino-contragestive, vaccine; human chorionic gonadotropin;
lucelnising hormone; LH: GG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match 97.7%; Score 759; DB 12; Length 145; Best Local Similarity 98.6%; Pred. No. 1.8e-61; Matches 138; Conservative 1; Mismatches 1; Indels Matches 138; Conservative 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR15120 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Table IV; Page 63; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                 91WO-US03162.
11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1991-353528/48.
                                                         hcg/blH chimera, D7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hCG/hLH chimera, A5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                 07-MAY-1991;
                                                                                                                                                                                                                                 Homo saplens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                           14-NOV-1991.
                                                                                                                                                                                                                                                                                                              WO9116922-A.
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ARR15120
ID XX ARR151
XX ARR151
XX II-FEE
XX II-FEE
XX II II-FEE
XX III-FEE
XX IIII-FEE
XX IIII-FEE
XX IIII-FEE
XX IIII-FEE
XX IIII-FEE
XX IIIII-FEE
XX IIII-FEE
XX III
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 οy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence is an analogue of mature hCG beta subunit having residues 199-144 replaced by histidine residues. This introduces additional cleaves sites for CNBr, useful for determining the disulphide bonds. This can be used to show that mutagenesis has not altered the "normal" disulphide pattern of analogues, and for See AMRISO41, AMRISO61-RISI25 and AMRISO61-RISI98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New glyco-protein hormone analogues - for inducing fertility as
immuno-castration agains, for supressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 97.74; Score 759; DB 12; Length 144; Best Local Similarity 100.08; Fred. Mc. 1.1e-61; Marches 188; Conservative 0; Mramtches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                              hCG histidine substitution mutant, G10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 58
AAR15103
LD AAR15103 standárd; Protein; 145 AA.
XX
AC AAR15103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Table VIII; Page 67; 94pp; English.
                                                                                                                                                                                                                      AAR15178 standard; Protein; 144
                   90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                     11-PEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 144 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo saplens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9116922-A.
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0; Gaps

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The sequence is an analogue of mature hoc bets subunit having a histidine and a glumanne residue residue inserted between testing the residues of and 5. This introduces an additional cleavage site for CMST, useful for determining the dissiphine bonds. This can be used to show that mutagenesis has not altered the formal disulphine bettern of analogues, and for examining protein folding.
                                                                                                                                                                                                                                                                                                                                                     Owery Watch 97.7%; Score 759; DB 12; Length 147; Best Local Similarity 98.6%; Pred. No. 1.8e-61; Indels 2; Gaps Matches 140; Conservative ; Mismatches 0; Indels 2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human: chorionic gonadotrophin; chorionic gonadotropin; beta-hCG; beta subunit; amino-terminal loop; mutant; reduction; LH; vaccine; contragestative medicament; cross-reactivity; luteinising hormone; contraceptive; fumnunoassay; Kaposi sarcoma; inhibition; neutralising antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chorionic gonadotrophin beta subunit amino-terminal loop mutant.
                         New glyco-protein hormone analogues - for inducing fertility a 
immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note- "wild type Val replaced with Tyr"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key Location/Qualiflers
Misc-difference 25
                                                                                 Table VIII; Page 67; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW27682 standard; protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                        Delves PJ, Lund T, Roitt IM;
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 WPI; 1991-353528/48.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1997-132639/12.
                                                                                                                                                                                                                      Sequence 147 AA;
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Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                    The sequence is an analogue of mature hCG beta subunit having residues 47, and 51 replaced by the corresponding residues in the human Lie protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in make and female animals.

See AARISO43, AARISO61-RIS128 and AARIS161-RIS198.
                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glycoprotein hormone; human chorionic gonadotropin; disulphide
                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 97.7%; Score 759; DB 12; Length 145; Best Local Similarity 98.6%; Pred. No. 1.88-61; Marches Matches 139; Conservative 9; Mismatches 2; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15175 standard; Protein; 147 AA.
                                                                                                                                                                                                                                                        Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                       (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hCG insertion mutant, G7.
                                                                                                                                                 Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Campbell RK, Moyle WR;
                                                                                                                                                                            WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                Sequence 145 AA;
                                                                                          08-MAY-1990;
                                                               07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-FEB-1992
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                                      14-NOV-1991.
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AAR15175
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The present sequence is the human chorionic gonadotrophin beta cabbully cabbully cabbully care and in the preparation of a contragestative which can be used in the preparation of a contragestative confederable. The modified beta-hoch has reduced cross reactivity with lutefainsing hormone (LH), as defined by the ability of both proteins to react with the same antibody. The modified beta-hoc an specific immunoassay and for applications where hoc is active, e.g. to specific immunoassay and for applications where hoc is active, e.g. to meuralising antibodies to beta-hoc, which do not cross-react with coher natural immonses.

W. B. Sequence not given in the specification, but constructed using the wild type beta-hoc sequence given in nature 307 959860, 37-40 (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modified beta-human chorionic gonadotrophin proteins - useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match
9:.4; Score 757; DB 18; Length 145;
Best Local Similarity 98:64; Pred. No. 2.70-61;
Matches 138; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luceinising hormone; LH: CG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15117 standard; Protein; 145 AA.
                                                                                                                                                                                                                 Claim 5; Page -; 23pp; English.
           Delves PJ, Lund T, Roitt IM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hCG/hLH chimera, A3a.
                                                                     WPI; 1997-132639/12.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 145 AA;
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AAR15117
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                                                                                                                                       The present sequence is the human chorionic gonadotrophin beta cabbuilt (beta-NGC), and not returnal loop muthan Val275yr.

The present: The modified beta-NGC has reduced cross reactivity with contents and the preparation of a contragestative medicament. The modified beta-NGC has reduced cross reactivity with lutefainst pornone (LH), as defined by the ability of both proteinsing hormone (LH), as defined by the ability of both be used as a contraceptive in females, in a vaccine, in a hGC specific immunoassay and for applications where hGC is active, or entralising antibodies to beta-hGG, which do not cross react with coher netural hormones.

N. B. Sequence not given in the specification, but constructed using the wild type beta-hGG sequence given in nature 307 959460, 37-40 (1984).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chorionic gonadotrophin beta subunit carboxy-terminal loop mutant.
Modified beta-human chorionic gonadotrophin proteins - useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 97.4%; Score 757; DB 18; Length 145; Best Local Similarity 98.6%; Pred. No. 2.7e-61; Matches 138; Conservative 0; Mismatches 2; Indels (
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Misc-difference 68 /note- "wild type Arg replaced with Glu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW27684 standard; protein; 145 AA
                                                                                         Example; Page -; 23pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 145 AA;
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Synthetic.
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The subtitution introduces an additional cleavage site for CMBr, useful for determining the disuphide bonds. This can be used to show that mutagenesis has not altered the 'normal' disulphide pattern of analogues, and for examining protein folding. See AMRIS041, AMRIS061-RIS125 and AMRIS161-RIS198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence is the human chorionic gonadorrophin beta subunit (beta-hCG), carboxy-terminal loop mutant Arg45se, witho can be used in the preparation of a contragestative; medicament. The modified beta-hCG has reduced cross-reactivity with luceinising hormone (Lis), as defined by the ability of both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; chorionic gonadotrophin; chorionic gonadotropin; beta-hCG; beta subunit; anino-terminal loop; mutant; reduction; LM; vaccine; contragestative medicament; cross-reactivity; luteinising hormone; contraceptive; immunoassay; Kaposi sarcoma; inhibition; neutralising antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chorionic gonadotrophin beta subunit carboxy-terminal loop mutant.
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                                                                                                                                                                                                                                                     Onery Match

97.34; Score 756; DB 12; Length 145;
Best Local Similarity 98.64; Pred. No. 3.34-61.
Matches 138; Conservative 0; Mismatches 2; Indels (
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AMAZ7688

Charloss grandard; protein; 145 AA.

AMAZ7688;

DT 12-JAN-1998 (first entry)

E Chorionic gonadotrophin beta subunit co

KW Human: chorionic gonadotrophin; chorior

KW Synthetic.

KW Hisc-difference 74

KW Hisc-difference 74

MO9704088-A2.

KW HO9704088-A2.

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KW H
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61. DVRFESIRLPGCPRGVDPVVSFPVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
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                                                                                                                                                                            The sequence is an analogue of mature hCG beta subunit having residues 77, 82, and 83 replaced by the corresponding residues in the human LH protein. The chimaric hormone may be useful in the treatment of infertility in men and women any promotion of fertility in male and female and immiles. See AMRISO43, AMRISO61-RIS125 and AMRISO61-RIS198.
New glyco-protein hormone analogues - for inducing fertility is immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hCG histidine substitution mutant, G8.
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                                                                                                                            Table VI; Page 65; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
Misc-difference 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09116922-A.
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      subunit (beta-hCG), carboxy-terminal loop mutant val79His, which can be used in the preparation of a contragestation the can be used in the preparation of a contragestativity with intelnishing hormone (id), as defined by the ability of both proteins to react with the same antibody. The medified beta-hCG can be used as a contraceptive in females, in a vaccine, in a hCG specific immunoassay and for applications where hCG is active, e.g. Raposi sarcoma inhibition. The medified beta-hCG can produce neutralishing antibodies to beta-hCG, which do not cross-react with chem natural hormones.

W. B. Sequence not given in the specification, but constructed using the wild type beta-hCG sequence given in nature 307 959460, 37-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
| 10-21 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 10-22 | 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Single chain gonadotropin; human chorionic gonadotropin; hCG; alpha; beta; subunit; analogue; glycoprotein hormone; fertility; inhubit; stimulate; increase; lutropin; luteinising hormone; LH; follicle stimulating hormone; FSH; vaccine; contraceptive; deglycosylated; glycosylation site; deletion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human CG beta-subunit (N13Q) lacking first glycosylation site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

9..21; Score 755; DB 18; Length 145;
Best Local Similarity 98.64; Pred. No. 4.1e-61;
Watches 138; Conservative 0; Mismarches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Misc-difference 70 Colemove a giftospitation site Region 7, note- "Arg corresponds to CCG codon" 166.12 linker 7, 120 174.181  
Region 7, 1281  
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-MAY-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Misc-difference 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W09522340-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seguence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
proteins to react with the same antibody. The modified beta-hGG can be used as a contraceptive in females, in a vaccine, in a hGG specific immunoassay and for applications where hGG is active, e.g. Rapost asrcoma inhibition. The modified beta-hGG can produce neutralising antibodes to beta-hGG, which do not cross-react with other natural hormones.

N.B. Sequence not given in the specification, but constructed using the wild type beta-hGG sequence given in nature 307 959460, 37-40 (1984).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chorionic gonadotrophin beta subunit carboxy-terminal loop mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is the human chorionic gonadotrophin beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

Q1.1%; Score 756; DB 18; Length 145;
Best Local Similarity 96.6%; Pred. No. 3:3-6-6;
Matches 138; Conservative 0; Mismatches 2; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "wild type Val replaced with His"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modified beta-human chorionic gonadotrophin proteins contragestative vaccine
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Misc-difference 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW27687 standard; protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Delves PJ, Lund T, Roitt IM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1997-132639/12.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-JUL-1996;
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Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9704098-A2.
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Campbell RK, Moyle WR;

17-FEB-1995; 95WO-US02067

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The sequence is an analogue of mature hCG beta subunit having residues 55, 56, and 58 replaced by the corresponding stations in the hFSH protein. It was propd: by site directed mutagenesis of a cDNA sequence encoding the hCG beta subunit. The chimeric hormone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and famels and may be useful.
                                           New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                       97.0%; Score 754; DB 12; Length 145; 97.9%; Pred. No. 5e-61; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chrinaic gonadotropin;
luteinising hormone; LH: GG; equine; horse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15110 standard; Protein; 145 AA
                                                                                                                                  Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 97.9%
Matches 137; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-FEB-1992 (first entry)
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  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hCG/eLH chimera, E2.
                                                                                                                                                                                                                                                                                                                                                                                               Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
Equus caballus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 69
AAR15110
ID AAR15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                      Single chain gonadotropins having a chorionic gonadotropin (CC) beta-subunit at the N-terminus and a CG alpha-subunit at the C-terminus (or vice versa), joined by a linker of 1-16 amino acids are cialmed, Ten specific analogues were synthesised, acario (which was expected to contain 4 Ann-linked oligosaccharides. Removal of the glycosylation sites, particularly from the alpha subunit, has been shown to reduce hormone efficacy and inhibit signal transduction. The present sequence is that of the hCG beta-subunit from which none of the two native glycosylation sites has been removed using strand overlap PCR.
                                                                                                                                                                                               Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating glyco:protein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match

97.24; Score 755; DB 16; Length 181;
Best Local Similarity 98.64; Pred. No. 5.18-61;
Matches 198; Conservative 0; Mismatches 2; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestric; vaccine; human chorionic gonadotropin;
Illicie stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                   Example 23; Fig 17; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR15065 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141 SKAPPPSLPSPSRLPGPSDT 160
94US-0199382.
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                                                                                                                         WPI; 1995-302553/39.
N-PSDB; AAT03240.
                                        (SENS-) SENSI-TEST.
18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-MAY-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-MAY-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                       Moyle WR;
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à qq ö g ð

0; Gaps

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subunit (beta-hGG), carboxy-terminal loop mutant Gly75His, with can be used in the preparation of a contragetative with can be used in the preparation of a contragetative with can endicament. The modified beta-hGG has reduced cross-reactivity with trefinishing bormone (LH), as defined by the ability of both proteins to react with the same antibody. The modified beta-hGG can be used as a contraceptive in females, in a vaccine, in a hGG CG specific immunosassy and for applications where hGG is active, e.g. Raposi sarcoma inhibition. The modified beta-hGG can produce CG netralising antibodies to beta-hGG, which do not cross-react with other natural hormones.

CE NB. Sequence not given in the specification, but constructed using the wild type beta-hGG sequence given in nature 307 959460, 37-40 (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                         2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human: chorionic gonadorophin: chorionic gonadorophin: beta-hCG; beta subunit; amino-terminal loop; mutant; reduction; LH; vaccios; contragestetive medicament; cross-reactivity; lutefinishing hormone; contraceptive, fmannoassay; kaposi sarcoma; inhibition; entralising antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Modified beta-human chorionic gonadotrophin proteins - useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chorionic gonadotrophin beta subunit amino-terminal loop mutant.
                                                                                                                                                                                                                                                                                 Query Match 97.01; Score 754; DB 18; Length 145; Best Local Similarity 98:64; Pred: NO. 56-61; Marches 188; Conservative 0; Mismatches 2; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note- "wild type Pro replaced with His"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key Location/Qualifiers
Misc-difference 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 71
AAW27681
ID AAW27681 standard; protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (DELV/) DELVES P J. (ROIT/) ROITT I M.
                                                                                                                                                                                                                                                   145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-JUL-1996;
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                                                                                                                                                                                                                                                   Sequence
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                                                  The sequence is an analogue of mature hCG beta subunit having residues 94.96 replaced by the corresponding residues in the equine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, agonist and/or antagonist. See ARRISO61-RISI25 and ARRISO61-RISI99.
                                                                                                                                                                                                                                                                                                                                                                         62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chorionic gonadotrophin beta subunit carboxy-terminal loop mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; chorionic gonadotrophln; chorionic gonadotropin; beta-hCG; beta subunit; amino terminal loop; mutan; reduction: Lii; vaccine; contragestative medicament; cross-reactivity; luceinising hormone; contraceptive; municassay; Kaposi sarcoma; inhibition; centralising antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modified beta-human chorionic gonadotrophin proteins - useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is the human chorionic gonadotrophin beta
                                                                                                                                                                                                               Outery Match 97.0%; Score 754, DB 12; Length 145; Best Local Similarity 97.9%; Pred, No. 5e-61; Metches 137; Conservative 1; Mismatches 2; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note- "wild type Gly replaced with His"
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Misc-difference 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW27686 standard; protein; 145 AA.
                       Table V; Page 64; 94pp; English.
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                                                                                                                                                                              Sequence 145 AA;
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Synthetic.
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The invention relates to the production of analogues of a heterodimeric subunit giycoprotein hormone (GPR), 9, human obtoinoic gonadotropin (CC (hCG), human lutefalials hormone (HCB), human intendising hormone (HCB), human intendising hormone (HCB), human intendising hormone (HCB), human intendising hormone (HCB), and intendising hormone (HCB), and intendising the more decisions and the series are subunit orgateins, which are modified to contain an intersubunit disupplied bond, between an alpha-subunit cysteine and a beta-subunit orgateins, for improved stability, the analogue retaining at least a portion of the blocativity for the corresponding native GPF receptor. This sequence corresponding and produce and the generation of the characteristic proved analogues are designed specifically corresponding preater likelihood that the dimer will be formed in vivo and the formed dimer will have affinity for the native receptors and have associated activity on them. The changes stabilise the GPHs and prolong the bloopicial activities of the hormones. The analogues can have uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGCCPTWIRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Onery Match 96.81; Score 752; DB 20; Length 165; Best Local Similarity 98.64; Pred. No. 9.7e-61; Marches 139; Conservative 0; Mismatches 2; Indels Matches 139; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone; immuno-castration;
immuno-contragestive, vaccine; human chorionic gonadotropin;
lucebinising hormone; LH; GG; equine; horse.
                            Disclosure; Fig 31B; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15112 standard; Protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141 SKAPPPSLPSPSRLPGPSDT 160
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hCG/eLH chimera, E4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
Equus caballus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chortonic gonadotropin; human iureinising hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCS; mutation
                                                                The present sequence is the human chorionic gonadotrophin beta couldn't beta-hCG), andno-terminal loop mutant Proteitis.

Which can be used in the preparation of a contragestative medicament. The modified beta-hCG has reduced cross recentivity with luteinisting hormone (LH), as defined by the ability of both proteins to react with the same antibody. The modified beta-hC can be used as a contraceptive in females, in a vaccine, in a hCC specific immunoassay and for applications where hCC is active, e.g. Kaposi sarcoma inthistion. The modified beta-hCC can produce to metural hormones.

When sequence not given in the specification, but constructed using the wild type beta-hCG sequence given in nature 307 959460, 37-40 (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPRFQASSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH or fifth, have an intersubult distulphide crosslink between the of phha - and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Query Match
Best Local Similarity 98.6%; Pred. No. 6.2e-61.
Matches 138; Conservative 0; Mismarches 2; Indels
Matches 138; Conservative 0; Mismarches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hCG-beta analogue hCG-beta'-Y37C, D99C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW99541 standard; Protein; 165 AA.
                         Example; Page -; 23pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98WO-US13070.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9708-0050784.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo saplens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W09858957-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-DEC-1998.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 72
AAW99541
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Ouery Match 96.4%; Score 749; DB 12; Length 145; Best Local Similarity 97.1%; Pred. no. 1.4e-66; Marches 136; Conservative 1; Mismatches 3; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLRPRCRPINATLAVEKBGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence is an analogue of mature hCG beta subunit having residues 89, 91, 92 and 89 replaced by the corresponding residues in the human LM protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female animals. See AMR15004, ARR15061-R15125 and AMR15161-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New glyco-protein hormone analogues - for inducing fertility a immuno-castration agents, for suppressing reproductive system development and also almanno-contragestive vaccines.
                                                                                                  Ouery Watch 96.4%; Score 749; DB 12; Length 145; Best Local Similarity 97.1%; Pred. no. 1.4e-06. Wetches 136; Conservative 1; Mismatches 3; Indels Matches 136; Conservative 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luteinising hormone; LR; CG.
and female animals. (See AAR1S043, AAR15061-R15125 and AAR15161-R15198).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR15118 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                           122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hCG/hLH chimera, A3b.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1991-353528/48.
                                                          Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-MAY-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR15118;
                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 75
AAR15118
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                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 96.5%; Score 750; DB 12; Length 145; Best Local Similarity 97.9%; Pred. no. 1.2e-06. Watches 137; Conservative 1; Mismatches 2; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 61
                                                     The sequence is an analogue of mature hCG beta subunit having residues 112-115 replaced by the corresponding residues in the equine ill protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, agonist sed AAR15043, AAR15061-R15125 and AAR151-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequence is an analogue of mature hCG beta subunit having residues 94-97 replaced by the corresponding residues in the hFSH protein. It was prepd. by site directed mutagenesis of a cown sequence encoding the hCG beta subunit. The chimeric charmone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New qlyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Table II; Page 61; 94pp; English.
               Table V; Page 64; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR15069 standard; Protein; 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hcg/hFSH chimera, B9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                      Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-MAY-1990;
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96.4%; Score 749; DB 20; Length 204;
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This sequence represents a fusion protein of the human chorionic gonadorrophin (htdc) beta subunit and Jun. The invention relates to a genedorrophin (htdc) beta subunit and Jun. The invention relates to a method of forming a cysteine knot protein (1) having alpha and beta subunits comprising attaching a dimerisation domain (DD) to either the N-terminol of both subunits or the N-terminol of the alpha-subunit and thereinsing the products to compress the N-terminol of the products to the N-terminol of polys bubmits or the N-terminol of the alpha-subunit and a heterodimeric protein analog (III) The method is used to produce analogues (sponists or artagonists) of deglycosylated glycoprotein hormones, procentally used. For treating infertility where caused to projective to a proper analogues (sponists) of deglycosylated glycoprotein caused by polycystic ovarian disease (associated with excessive levels of immunogens or antigens (since a DD may containing highly antigenic anno acid sequences). Attachment of a DD (which may be removed later) and allows the combination of subunits that would otherwise combine properties). On acid sequences, and allows the combination of subunits that would otherwise combine productive and allows the combination of authority, and attachment of the DD reduces to poolly.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; autigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; bera subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                    66 ESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAP 125
                                      0; Gaps
    Best Local Similarity 100.0%; Pred. No. 2e-60;
Matches 136; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human CG beta subunit-Jun fusion protein sequence.
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ANY 43274

ANY 43274

ANY 43274

ANY 43274

ANY 43274;

ANY 43274;

ANY 13274;

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BY

19-JAN-2000 (first entry)

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Human CC beta subunit-Jun fusion prote a cycle sign specific over a cycle specific over a cycle specific over a cycle over a cycle specific over a c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cysteine knot protein; protein formation; heterodimeric protein analog; deglycoglyted glycoprotein hormone; infertility; immunogen; antigen; polycystic ovatian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                  1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPIMTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human CG beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY43270 standard; Protein; 204 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Fig 6; 73pp; English.
                                                                                                                                                                                                             13-APR-1999; 99WO-US08018.
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N-PSDB; AAZ31742.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9953065-A1.
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                                                                                                                                                                                                                                                                                                                                                                                              MAK43377 76

MAK4377 76

MAK4377 76

MAK4377 76

MAK4377 19

MAK4377 19

MAK4377 19

MAK4377 19

MAK4377 19

MAK437 19

MAK47 19

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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTNTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence is the human chorionic gonadotrophin beta submit (beta-hCG), anino-terminal loop mutant Proidills, validary, which can be used in the preparation of a contragestative medicament. The break-hCG has reduced from official promone (iff), as defined by redead into both proteins to react with the same antibody. The medicaled beta-hCG can be used as a contraceptive in Genales, in a vaccine, in a hCG specific immunoassay and for applications where hCG is active, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; chorionic gonadotrophin; chorionic gonadotropin; beta-hCG; beta subunit; amino terminal loop; mutant; reduction; LH; veccine; contragestative medicament; cross-reactivity; lucinising hormone; contraceptive; miminossay; Raposi sarcoma; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified beta-human chorionic gonadotrophin proteins - useful as contragestative veccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chorionic gonadotrophin beta subunit amino-terminal loop mutant.
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                                    Ouery Watch

96.34; Score 748; DB 18; Length 145;
Best Local Similarity 97.39; Pred. No. 1.8e-60;
Watches 137; Conservative 0; Mismatches 3; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Misc-difference 70cte- "wild type Pro replaced with His" Misc-difference 70cf- "wild type Val replaced with Tyr"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key Location/Qualifiers
Misc-difference 24
                                                                                                                                                                                                                                                                                                                                                                             679
AAW27679 standard; protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example; Page -; 23pp; English.
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                                                                                                                                                                                                                                                              122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                      121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96WO-GB01717.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-JAN-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1997-132639/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DELV/) DELVES P J. (ROIT/) ROITT I M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-JUL-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
Synthetic.
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       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                AAW27679;
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Largy-deer, which can be used in the preparation of a contragestative medicament. The modified beta-hCG has reduced cross reactivity with lutelainship hormone (iH), as defined by the ability of both both lutelainship hormone (iH), as defined by the ability of both beta-hCG can proteins to react with the same anti-body, the modified beta-hCG can specific immunoassay and for applications where hCG is active, e.g. Kaposi sarcoma inhibition. The modified beta-hCG can produce constraints and hormones to beta-hCG, which do not cross-react with constraint hormones.

N.B. sequence not given in the specification, but constructed using the wild type beta-hCG sequence given in nature 307 959460, 37-40 (1984).
                                                                       Chorionic gonadotrophin beta subunit carboxy-terminal loop mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                              maman: chorionic gonadorrophin; chorionic gonadorropin; beta-NGG; beta subunit; amino-terminal loop; mutant; reduction: LH; vaccine; contragestrive medicament; cross-reactivity; luceinising hormone contraceptive; mamnoassay; kaposi sarcoma; inhibition; energalising antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modified beta-human chorionic gonadotrophin proteins - useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "wild type Gly replaced with Arg" Misc-difference 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "wild type Arg replaced with Ser"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key Location/Qualifiers
Misc-difference 71
                                                                                                                                                                                                                                                                               AAW27685 standard; protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example, Page -; 23pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Delves PJ, Lund T, Roitt IM;
                                                                                                                                                                     121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                 122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96WO-GB01717.
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                                                                                                                                                                                                                                                                                                                                                      12-JAN-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-132639/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DELV/) DELVES P J. (ROIT/) ROITI I M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-JUL-1996;
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Gaps

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and allows the combination of subunits that would otherwise combine poorly, or not at all. The Wrettrainal part of a glycoprotein hormone may be modified without loss of activity, and attachment of the DD reduces formation of homodimers: Reterodimers have longer circulation times in vivo than individual subunits.
                                                                                                                                                                                                                                                                           68 LRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRF 127
                                                                                                                                                                                                              6 LRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRF 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequence is an analogue of mature hCG beta subunit having residues 2, 8, 10, and 15 replaced by the corresponding residues in the human LH protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of treatment of infertility in men and women and the see AARISO41, AARISO61-RIS125 and AARIS161-RIS198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New glyco-protein hormone analogues - for inducing fertility of immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                          Length 208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Glycoprotein hormone; immuno-castration;
immuno-contragestives vaccine; human chorionic gonadotropin;
luceinising hormone; LH; CG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96.3%; Score 748; DB 12; Length 145; 97.1%; Pred. No. 1.8e-60; tive 1; Mismatches 3; Indels (
                                                                                                                                          Ouery Match 96.4%; Score 748; DB 20; Length 208 Best Local Similarity 100.0%; Pred. No. 2.1e-66; Indels Matches 136; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR15114 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                       126 PPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                            188 PPSLPSPSRLPGPSDT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 97.11
Matches 136; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hCG/hLH chimera, Al.
                                                                                                         208 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 145 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAY-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9116922-A.
                                                                                                         Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      this sequence represents a fusion protein of the human chorionic conductorphin (HCC) alpha subunit and Fos. The invention relates to a conductorphin (HCC) alpha subunit and Fos. The invention relates to a control of comming a cysteine knot protein (1) having alpha and control of comprising attaching a dimerisation domain (DD) to either the N-termini of both subunits or the N-terminis (DD) to either the N-terminis of the alpha-subunit and control of a polycyptic ovariand disease (associated with excessive levels of intentialing homeone). Products that rectain DD's are also useful as a functional sequences or antigents of a DD (which may be removed later).

Confidentialing control of the protection of the control of the alpha-subunity antigenic annot confident thus receptor-binding and immunogenic properties) to native dimers,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorlonic gonadotrophin; alpha subunit; therapy; Pos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                     66 ESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAP 125
                                                                                                                                                                                                                                 Gaps
                                                                                                         0;
                                                                 Query Watch 96.44; Score 749; DB 20; Length 204; Best Local Similarity 100.04, Pred. No. 2e-60; Macches 16; Conservative 0; Hismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human CG alpha subunit-Fos fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                        AAY43306 standard; Protein; 208 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 2; Fig 10; 73pp; English.
vivo than individual subunits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                     184 PPSLPSPSRLPGPSDT 199
                                                                                                                                                                                                                                                                              126 PPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UYNE-) UNIV NEW JERSEY.
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                              Sequence 204 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo saplens.
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY43306;
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Gaps

8888888

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61 DVRFESIRLPGCPRGVNPVVSTAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRPQDSSS 120
                                                                                                                   62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 DVRFESIRLPGCPRGVNPVVSXAVALSCOCALCRRSTTDCGGPKDHPLTCDDPRPGDSSS 121
       Gaps
                                    The sequence is an analogue of mature hCG beta subunit having residues 86, 87, 89, 91 and 92 repishede by the corresponding residues 86, 87, 89, 91 and 92 repishede by the corresponding receives in the hFSH protein. It was propd. by site directed mutagenesis of a CDNA sequence encoding the hCG beta subunit. The chimeric hormone is capable of directing hormone blanding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See ANRISO41, ANRISO61-RISI25 and ANRISI61-RISI38).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New glyco-protein hormone analogues - for inducing fertility a immuno costration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96.0%; Score 746; DB 12;
96.4%; Pred. No. 2.7e-60;
tive 0; Mismatches 5;
                                                                                                                                                                                                                                                                                    RESULT 83
AAR15068
ID AAR15069 standard; Protein; 145 AA.
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Best Local Similarity 96.4%
Matches 135; Conservative
         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                  hCG/hFSH chimera, B8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                           AAR15068;
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                                                                                                                                                                                                                                                                                                                    2 SKEPLARRCAPINATLAVEKBGCPVCITVNTTICAGYCPTHTRVLGGVLPALPQVVCNYR 61
1 SKEPLARRCAPINATLAVEKBGCHCTIVNTTICAGYCPTHTRVLGGVLPALQQVVCNYR 60
1 SKEPLARRCAPINATLAVERGCHCTIVNTTICAGYCPTHTRVLGGVLPALQQVVCNYR 60
                                                                                                                                                                       96.3%; Score 748; DB 18; Length 145;
97.9%; Pred. No. 1.8e-60;
Live 0; Mismatches 3; Indels 0; Gaps
Kaposi sarcoma inhibition. The modified beta-hCG can produce neutralising antibodies to beta-hCG, which do not cross-react with orber natural hormones.

N.B. Sequence not given in the specification but constructed using tibe wild type beta-hCG sequence given in nature 307 959466, 37-40 (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New glyco-protein hormone analogues . for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequence is an analogue of mature hCG beta subunit having residues 47, 47, 51 and 58 replaced by the corresponding residues in the human LH protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female animals. See. ARMISO43, ARMISO43, ARMISO61-RISISS and ARMISJ61-RISI99.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 747; DB 12; Length 145;
Pred. No. 2.2e-60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Glycoprotein hormone, immuno-castration;
Immuno-contragestive, vaccine, human chorlonic gonadotropin;
Intelnising hormone, LH; CG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR15115 standard; Protein; 145
                                                                                                                                                                                                                                                                                                                                                                                           122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                 121 SKAPPPSLPSPSRLPGPSDT 140
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Best Local Similarity 97.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-FEB-1992 (first entry)
                                                                                                                                                                       Query Match
Best Local Similarity 97.9
Matches 137; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hCG/hLH chimera, A2.
                                                                                                                                     Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-MAY-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W09116922-A.
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RESULT E AARISIIS ID AAF

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Human chorionic gonadotropin; HCG; beta subunit; abortive; antifertility; 
YCOSILIC; vaccha; contraception; hormone related disease; 
hormone-associated carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96.04; Score 746; DB 12; Length 145;
97.94; Pred. No. 2.7e-60;
tive 0; Mismatches 3; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence is an analogue of mature hCG beta subunit having residue l16 replaced by a Cys residue. This introduces an additional cleaves This for CMBr, useful for determining the disulphide bonds. This can be used to show that mutagenesis has not altered the "normal disulphide pattern of analogues, and for see Ammining protein folding" disulphide pattern of analogues, and for see AMR15041, AAR15061-R15125 and AAR15161-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                 Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human chorionic gonadotropin beta subunit structure I.
                                                                                                             hCG histidine substitution mutant, G8.
  AAR15176 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Table VIII; Page 67; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB48385 standard; Protein; 145 AA.
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                                                                                                                                                                                                                                                                                            91WO-US03162.
                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 97.91
Matches 137; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                   Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 145 AA;
                                                                                                                                                                                                                                                                                          07-MAY-1991;
                                                                                                                                                                                                                                                        14-NOV-1991.
                                                                                                                                                                                                                                                                                                                             08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                   Campbell RK,
                                                                     11-FEB-1992
                                                                                                                                                                                                                    WO9116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB48385;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
61 DVRFESIRLPGCPRGVNPVVSYAVATQCHCGKCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The sequence is an analogue of mature hcc beta subunit having residues 74, 77, 79, 82 and 83 replaced by the corresponding residues in the bowine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human records and may also have applications as an immunogen, see AARISO43, AARISO61-RISI25 and AARISO61-RISI98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New glyco-protein hormone analogues - for inducing fertility a 
immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 96.0; Scord 746; DB 12; Length 145; Best Local Shallarity 96.4%; Pred. Wo. 2.74-60; Matches 135; Conservative 3; Mismatches 2; Indels Matches 135; Conservative 3; Mismatches 2
                                                                                                                                                                                                                                                                                                        Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luteinising hormone; LH; CG; bovine.
                                                                                                                                                           AAR15101 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Table IV; Page 63; 94pp; English.
                                 122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           90US-0520703.
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                                                                                                                                                                                                                                11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                      hCG/blH chimera, D5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-NOV-1991.
                                                                                                                                                                                               AAR15101;
                                                                                                                         RESULT 84
AAR15101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 85
AAR15176
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The sequence is an analogue of mature hCG beta subunit having residues 36, 60-26, 55 and 67 replaced by the corresponding residues in the bovine Life protein. The chimeric hormone may be useful for identifying residues within are important for binding to the human receptor and may also have applications as an immunogen, see ANRIGH31 ANRIGOGI-RISI23 and ANRISIGI-RISI398.
                                                                                                                                                                                               New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                         Ouery Watch 95.94; Score 745; DB 12; Length 145; Best Local Similarity 95.74; Pred. No. 3.3-6-6) Matches 134; Conservative 3; Misaktches 3; Indels Watches 134; Conservative 3; Misaktches 3; Indels 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Glycoprotein hormone; immuno-castration; immuno-contragestive; vaccine; human chorionic gonadotropin; luteinising hormone; LH; CG; bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR15098 standard; Protein; 145 AA.
                                                                                                                                                                                                                                             Table IV; Page 63; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 SKAPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 SKAPPPSLPSPSRLPGPSDT 141
                                                                         91WO-US03162.
                                                                                                90US-0520703.
                                                                                                                        (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-FEB-1992 (first entry)
                                                                                                                                               Campbell RK, Moyle WR;
                                                                                                                                                                     WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hCG/bLH chimera, D2.
                                                                                                                                                                                                                                                                                                                                                                 Sequence 145 AA;
                                                                       07-MAY-1991;
                                                                                                08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-MAY-1991;
                                                 14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-MAY-1990;
                        WO9116922-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-NOV-1991.
   Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR15098;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 88
AAR15098
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 合
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                                                                                                                                                                                                                                                                                                                                                             The present sequence is a fragment of the beta subunit of human chorionic gonddotropin (EGG). It is given in a specification relating to a vaccine composition capable of eliciting antibody formation against the face. The vaccine comprises an HCG polypeptide coupled to diphiberia toxoid or tetanus toxoid and a vehicle comprising a mixture of mannide monoclaste with squalane or squalene, The vaccine is useful for contraception, abortion or treatment of hormone related disease states and disorders and the treatment of hormone-associated carcinomas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96.0%; Score 746; DB 22; Length 145;
97.9%; Pred. No. 2.7e-60;
Live 0; Mismatches 3; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 SKEPLRPRCRPINATIAVEKEGCPVCITVNTTICAGXCPTWTRVLGGVLPALPOVVCNXR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                    Antigenically modified polypeptide composition used as a vaccine against human chorlonic gonadotropin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glycoprotein hormone; Immuno-castration;
Immuno-confragestive; vacchier, human chorionic gonadotropin;
Internising hormone; LH: GG: bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 32; Column 18; 55pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                           7805-0936876

8705-0073748

9205-0935331

8905-0311331

7305-0456821

7405-0452955
                                                                      95US-0471422
                                                                                                                                                                                             81US-0112628
81US-0323690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 97.9°
Matches 137; Conservative
                                                                                                                                                                                                                               (OHIS ) UNIV OHIO STATE.
                                                                                                                                                                                                                                                                               WPI; 2001-023400/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 145 AA;
                                                                                           25-AUG-1978;
15-JUL-1987;
26-AUG-1992;
17-FEB-1992;
07-MAY-1973;
16-OCT-1973;
14-OCT-1975;
16-JUL-1981;
20-NOV-1981;
                                                                                                                                                                                                                                                      Stevens VC; ·
                                                                    06-JUN-1995;
                      US6143305-A.
                                             07-NOV-2000.
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0; Gaps

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2 SKEPLRPRCRPINATLAVEKBGCPYCITVNTTICAGYCPTATRVLGGVLPALPOVVCNYR 61
1 SKEPLRPRCRPINATLAVENREDVOITYNTTICAGYCPTATRVLGGVLPALPOVVCNYR 60
1 SKEPLRPRCRPINATLAVENREDVOITYNTTICAGYCPTATRVLGGVLPALPOVCHYR 60
                                                                                                                                                                                                                                                                                                                                                                        The present sequence is the human chorionic gonadotrophin beta subunit (beta-hCG), amino-terminal loop mutant Lya20Ana, GiuJJArg, GiUJZAG, GIUJZAG,
                                                                                                                                                                                                                                              Modified beta-human chorionic gonadotrophin proteins - useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95.8%; Score 744; DB 18; Length 145; 97.1%; Pred. No. 4e-60; tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luteinising hormone; LH; GG; bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR15102 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                             Example; Page -; 23pp; English.
                                                                                                                                     Delves PJ, Lund T, Roitt IM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 SKAPPPSLPSPSRLPGPSDT 140
19-JUL-1995; 95GB-0014816.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 97.11
Matches 136; Conservative
                                                                                                                                                                                        WPI; 1997-132639/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hCG/bLH chimera, D6.
                                                      (DELV/) DELVES P J. (ROIT/) ROITT I M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 145 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR15102;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               O; Caps
                                                                                                                                                                                                                                                                                                                                               The sequence is an analogue of mature hCG beta subunit having residues 18, 22, 29, 30 and 32 replaced by the corresponding residues in the boune LM protein. The chimeric hormone may be useful for identifying residues within are important for binding to the human receptor and may also have applications as an immunogen, seen ARR10443, ARR1061-R1512 and ARR15161-R15199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       manna: chorionic gonadotrophin: chorionic gonadotropin; beta-hCG; beta subunit; andio-terminal loop; mutant; reduction: LH; vaccine; contragestative medicoment; Cross-reactivity; lucinising hormone; contraceptive; faminossay; kaposi sarcoma; inhibition; electralising antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chorionic gonadotrophin beta subunit amino-terminal loop mutant.
                                                                                                                                                                                    New glyco-protein hormone analogues - for inducing fertility ;
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Outery Match

95.94; Score 745; DB 12; Length 145;
Best Local Similarity 96.44; Pred. No. 3.3-6-6)
Matches 135; Conservative 1; Mismatches 4; Indels

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note- "wild type Lys replaced with Asn" / Misc-difference 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "wild type Gly replaced with Glu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key Location/Qualifiers
Misc-difference 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW27678 standard; protein; 145 AA.
                                                                                                                                                                                                                                                                                             Table IV; Page 63; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 SKAPPPSLPSPSRLPGPSDT 141
                         (UYNE-) UNIV MED NEW JERSEY.
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                                                                           Campbell RK, Moyle WR;
                                                                                                                              WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-JUL-1996;
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The sequence is that of a modified form of human chorionic gonadotrophin (hCG), analogue. "O', in which amino acids in the "O' and/or" o' regions have been subtilitude resulting in changes in the binding specificity and avidity of luteinising hormone (LB) and follicle stimulating hormone (CB) receptor. It is was used in the pream of an alpha, beta-heterodimentic polypeptide having an affinity to vertebrate LH and FSB: LE acceptors. Such an analogue can be prepared having a desired ratio of FSB: LB activity. The polypeptide may be used for treating human infertility or polycystic ovarian disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                     New alpha, beta-hetero:dimeric polypeptide derivs. - which bind to tructinising and follicle stimulating homeone receptors, useful for controlling the ratio of FSH to LH activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HGC; human; chorionic gonadotropin; beta-subunit; heterodimer; alpha-subunit; lH receptor; FBT receptor; LHF; FBT; hyrotropin; breadon, o-region; protein engineering; fertility; hormone; folitele stimmiating hormone; luteinising hormone; TSH; ovulation; spermatogenesis.
                                                                                                                                                                                                                                                                                                                                                                              Query Match 95.6; Score 743; DB 14; Length 145; Best Local Similarity 96.44, Pred: No. 5e-60; Machae 15; Conservative 1; Mismatches 4; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Human FSH D-region"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "HCG sequence"
94..97
/note= "Human FSH D-reg
98..145
/note= "HCG sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                        Disclosure; Page 21; 98pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR88923 standard; protein; 145 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HCG analogue-D beta-subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91US-0717151.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94US-0184408.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-JUL-1996 (first entry)
    Campbell RK, Moyle WR;
                                    WPI; 1993-018070/02.
                                                                                                                                                                                                                                                                                                                                                Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-JAN-1994;
18-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US5508261-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-APR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR88923;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hCG: glycoprotein hormone analogue; human infertility; LH; ESH;
luteinising hormone receptor; follicle stimulating hormone receptor;
vertebrate; polycystic ovarian disease.
                                                                                                                                                                                                    The sequence is an analoque of mature hCG beta subunit having residues 89; 91, 92, and 97 replaced by the corresponding residues 10; 91, 92, 95 and 97 replaced by the corresponding residues 10 the bovine LH protein. The chimeric hormone may be useful for identifying residues which art importent for binding to the human receptor and may also have applications as an immunogen, agonist and/or antegonist.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94...*
70...* D region - LH binding and specificity*
100...106
/note= "G region - FSH binding and specificity"
                                                                                                   New glyco-protein hormone analogues - for inducing fartility a immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vacchnes.
                                                                                                                                                                                                                                                                                                                                                                            Query Match 95.6%; Score 743; DB 12; Length 145; Best Local Similarity 96.4%; Pred. No. 96-60; Matches 15; Conservative 1; Mismatches 4; Indels Matches 15; Conservative 1; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94..97
/note= "non-hCG derived residues"
94..97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified hCG beta-subunit - analogue "D".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR31006 standard; protein; 145 AA.
                                                                                                                                                                   Table IV; Page 63; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 SKAPPPSLPSPSRLPGPSDT 140
(UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9108-0717151.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-MAY-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYNE-) UNIV NEW JERSEY.
                                  Campbell RK, Moyle WR;
                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                            Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-JUN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-DEC-1992.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR31006;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
Region
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AAR31006
ID AAR31
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The invention relates to human single chain forms of the glycoprotein chromograph which is an agonist or antagonist of intensinish phormone component of the control of control of the control of the cont
                                                                                                                                                                                                                                                                                                                                                                           /note= "Linker peptide"
174..265
/note= "Corresponds to 1-92 amino acids of human single chain genadotropin alpha-subunit"
275
/note= "Wild type Asn substituted with Xaa, Where Xaa
refers to Gln or other amino acid"
50
                                                                                    /note- "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                      /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note- "Wild type Asn substituted with Xaa, Where Xaa refers to Gln or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other inferipeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                             700te- "Wild type Val substituted with Thr" 166..173
/note- "Linker peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 9; Column -; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94US-0199382.
94US-0289396.
94US-0310590.
94US-034628.
94US-0351591.
95US-0475049.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-366474/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Boime I, Moyle WR;
                                                                                                                      Misc-difference
                                                                                                                                                                                                                             Misc-difference
                                                                                                                                                                                                                                                                                                                                Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-AUG-1994;
12-AUG-1994;
22-SEP-1994;
04-NO-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US6238890-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-MAY-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Region
                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequence is an example of a glycoprotein hormone beta-chain
canalogue used to construct an alpha, beta-heterodimer polypeptide
with altered binding affainty to LH receptor and FSH receptor. The
content preferably contains an HGG alpha-subunit and a chimaeric
beta-subunit containing HGC, LH, FSH and/or thyrotropin residues.
Containing affainty may be altered without disrupting
the containing HGC, LH, FSH and/or thyrotropin residues.
Containing affainty may be altered without disrupting
the terodimer formation or reaction with antibodies. The pregion of
HGG is most important for reaction with antibodies. The pregion of
HGG is most important for the receptor binding, and the G-region is
contained in the receptor and analogue. Dispute the captor with considerably lower potency thank HGC,
contained in a CGS-7 cell culture. This type of hormone analogue
contained the contained in the contained of the contained of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; single chain gonadotropin analog no:1b; anti-infertility; drug; peptide therapy; lucefulising hormone; LH; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein; mutean; mutean.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPIMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.SKEPLRPRCRPINATLAVEKEGCPVCITVNITICAGYCPTMTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                                                                                                                                                  New alpha, beta hetero:dimeric glyco:protein hormone polypeptide(s) - having a non-naturally occurring beta-subunit derived from hGG, LBI, FSH and TSH and TSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
11..165 2...167 amino acids of human chorer "Corresponds to 1.145 amino acids of human chorionic gonadotropin (CG) beta-subunit*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 95.6%; Score 143; DB 17; Length 145; Best Local Similarity 96.4%; Pred. No. 5e-67; Matches 135; Conservative 1; Mismatches 4; Indels
                                                                                                                                                                                                                                  Wang Y;
                                                                                                                                                                                                                             Moyle WR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human single chain gonadotropin analog no:1b.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Column 11-12; 27pp; English.
                                                                                                                                                                                                                         Han Y, Macdonald GJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAE04518 standard; Protein; 265 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 SKAPPPSLPSPSRLPGPSDT 141
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                                               93US-0108845.
95US-0425673.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Misc-difference
                                               18-AUG-1993;
18-APR-1995;
                                                                                                                                                                                                                         Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo saplens.
Synthetic.
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Human chorionic gonadotropin beta subunit; HCG-beta; epitope homopolymer; Humanogenic; antibody production; immunocontraception; abortifacient; vaccine; fertility control.
                                                                                                                                                                                               2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a polypeptide linear homopolymer comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antigenically modified polypeptides useful for treating cancer, 
yperfension, diabetes and associated vascular diseases comprises 
immunogenic polypeptides conjugated to carrier moleties
                              ö
97.1%; Pred. No. 7.6e-60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human chorlonic gonadotropin beta subunit.
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Misc-difference 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY87479 standard; peptide; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /label- unknown
Misc-difference 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          label- unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /label- unknown
                                                                                                                                                                                                                                                                                                               122 SKAPPPSLPSPSRLPGPSDT 141
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   Best Local Similarity 97.1
Matches 136; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Misc-difference 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-AUG-1978;
15-JUL-1987;
26-AUG-1992;
17-FEB-1989;
07-MAY-1973;
16-OCT-1973;
22-APR-1974;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-OCT-1975;
16-JAN-1980;
20-NOV-1981;
04-MAR-1983;
18-MAY-1983;
02-NOV-1984;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY87479;
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                                                                                                                                                                                                                                                                                                                                                                                                                        62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                          hormone-specific vaccines for use in humans.

Note: The present sequence is not shown in the specification, but is derived from the human single chain gonadotropin analog no:1 shown as SEQ ID NO: 3, in figure 5 of the specification (AAEO4474).
                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                            The sequence is an analogue of mature hCG beta subunit having residues 39, 41, 42 and 41 steplaced by the corresponding residues in the hFSH protein. It was prepd. by site directed mutagenesis of a cDNA sequence encoding the hCG beta subunit. The climenic hormone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15043, AAR15061-R15125 and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New glyco-protein hormone analogues & for inducing fertliity a immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive wacthes.
                                                                                                                                                                                           Query Match
95.64; Score 743; DB 22; Length 265;
Best Local Similarity 97.18; Pred. No. 9.2e-60;
Matches 136; Conservative 0; Mismatches 4; Indels
Matches 136; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
follicie stimulating hormone; PSH; G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 12; Length 145;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR15063 standard; Protein; 145 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141 SKAPPSLPSPSRLPGPSDT 160
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hCG/hFSH chimera, B3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1991-353528/48.
                                                                                                                                          Sequence 265 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-MAY-1990;
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This sequence represents a fusion protein of the human chorionic conditions and advantage of the sequence represents a fusion protein of the human chorionic conditions are subunits and almerisation domain (DD) to either the net subunits comprising attaching a dimerisation domain (DD) to either the N-termin of both subunits or the N-terminus of the alpha-subunit and the condition of the beta-subunit and dimerisation dead in the products to form the N-terminus of the alpha-subunit and the network of the alpha-subunit and the network of the alpha-subunit and to the N-terminus of the alpha-subunit and the network of the alpha-subunit and to the N-terminus of the alpha-subunit and to the N-terminus of the alpha-subunit and the network of the products to antegonists or antegonists of dealyrosylated alpha-subunit and the products that retain differentially where caused the propuly antegonist or antigons (since a DD may containing highly antigonic amino the network of the production of the pass of the pass of the pass and the pass and the subunity and the pass an
                                                               Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       64 IRPRCRPINATIAVEKEGCPVAITVNTTICAGYCPTWTRVLQGVLPALPQVVCNTRDVF 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66 ESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAP 125
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99.3%; Pred. No. 1.3e-59;
tive 0; Mismatches 1; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6 LRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRF 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fusion protein; thrombopoletin; TPO; human chorionic gonadotrophin; beta subunit; hCG-beta.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
279..1202
/*tag- a
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                                                                                                                                                                                                    Example 3; Fig 13; 73pp; English.
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Best Local Similarity 99.31
Matches 135; Conservative
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three or more peptide monomers which may be used as an immunocontraceptive and/or aboriticatent. The peptide andonomers are factured from the C-terminal portion of the human chorionic peptides derived from the C-terminal portion of the human chorionic genedictopin beta subunit (HGC-beta) comprising either residues 105-145 cc of HCC beta (AAV87501) or residues 111-145 of HCC-beta (AAV876480). By the peptide monomers are non-immunogenic; bawever the homopolymer is capable of inducing anti-HCC antibody production HCC plays a role in the maintenance of pregnancy, and has also been shown to induce ovulation and stimulate corpus intend function. Anti-HCC antibodies are alsed against the homopolymer of the invention are not cross reactive with lutenisising homomo (HB). The first 10 residues of HCC-beta are thrushly identical to those of LB, and prior art anti-HCC antibodies are thrushly identical to those of LB, and prior art anti-HCC antibodies are thrushly identical to those of LB, and prior art anti-HCC antibodies are thrushly coarse early abortion by neutralising CG in the perinancy is disrupted almost immediately after Corpus intenm. The pregnancy is disrupted almost immediately after corpus content of female fertility. The present sequence represents the beta exemplification of the present enveronment of none exemplification of the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGS, hyman; chorlonic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     62 DVRFESIRLPGCPRGVMPVSYAVALSCOCALGRRSTTDGGGRRDHPLTGDDRRFQDSSS 123 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 1111 | 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match 95.41; Score 741; DB 21; Length 145; Best Local Similarity 97.18; Pred. No. 7.6e-60. Matches 136; Conservative 1; Mismatches 3; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human CG beta subunit-Jun fusion protein sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-620431/53.
N-PSDB; AAZ31751.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-APR-1998;
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Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W09953065-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY43275;
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AAY43275
ID AAY432
XX
AC AAY432
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68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTOCGGRDHPLTCDDRRFQDSSSSKAPPP 127
258 IRLPCCPRGVNPVVSYAVALSCQCALCRRSTTOCGGRDHPLTCDDPRFQDSSSSKAPPP 317
258 IRLPCCPRGVNPVVSYAVALSCQCALCRRSTTOCGGRDHPLTCDDPRFQDSSSSKAPPP 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 95.2%; Score 740; DB 18; Length 336; Best Local Similarity 100.0%; Pred. No. 2.2e-59; Matches 114; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                     A movel fusion protein comprises 2 dimer forming co-expressed anino acid sequences, each consisting of a homodiment or heterodiment receptor child or ligand, with ligand-receptor binding activity, bound directly or via a peptide linker to a subunit of a heterodiment protein homome capable of forming a heterodimer with the homomes so ther subunits. The fusion protein, e.g. the thromopoletin (PO)/human chorionic gonadcirophin-beta subunit (hGC-beta) fusion protein denoted by the present sequence, significantly increases the biological activity of the homome component, reducing the requirement for homome liself and the number of injections needed.
                              Hybrid dimeric protein comprising two co-expressed units - each based on receptor or ligand and a subunit of a heterodimeric hormone, especially FSH, for inducing follicular maturation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luceinising hormone; LH; GG; bovine.
                                                                                                                             Example; Pages 39-40; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR15097 standard; Protein; 145 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           128 SLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          318 SLPSPSRLPGPSDT 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hCG/bLH chimera, Dl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 336 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-NOV-1991.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     68 IRLPGCPRGVRPVVSTAVALSCQCALCRRSTIDCGGPKDHPLTCDDPRFQDSSSSKAPPP 127
229 IRLPGCFRVAVPVVSTAVALSCQCALCRRSTIDCGGPKDHPLTCDDPRFQDSSSSKAPPP 38
229 IRLPGCFRVAVPVVSTAVALSCQCALCRRSTIDCGGPKDHPLTCDDPRFQDSSSSKAPPP 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                       A movel fusion protein comprises 1 dimer forming co-expressed amino acid sequences, each consisting of a homodiment or heterodiment receptor child or ligand, with ligand-receptor binding activity, bound directly or via a peptide linker to a subunit of a heterodiment cherodiment protein hormone capable of forming a heterodimer with the hormone 3 other subunits. The fusion protein, e.g. the thrombopietin (FPO)/human chorionic againstophin-beta subunit hordopoletin (FPO)/human chorionic againstophin-beta subunit hordopens, reducing a some chorionic againstophin-beta subunit significantly increases the biological activity of the hormone component, reducing the requirement for hormone tuseif and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fusion protein; thrombopoletin; TPO: human chorionic gonadotrophin; beta subunit; hCG-beta.
                                                                                                                                                                         Hybrid dimeric protein comprising two co-expressed units - each based on receptor or Ilgand and a subunit of a heterodimeric hormone, sepecially FSH, for Inducing follicular maturation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95.2%; Score 740; DB 18; Length 307; 100.0%; Pred. No. 2e-59; Live 0; Mismatches 0; Indels 0;
(ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.
                                           Campbell RK, Chappel SC, Jameson BA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Campbell RK, Chappel SC, Jameson BA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TBP(20-190)/hCG-beta fusion protein.
                                                                                                                                                                                                                                                                              Example; Pages 34-35; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 98
AAW313160
1D AAW313160 standard; Protein; 336 AA.
X AAW313160;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97WO-US02315.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0
Matches 134; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     128 SLPSPSRLPGPSDT 141
                                                                                                  WPI; 1997-425036/39.
N-PSDB; AAT94008.
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N-PSDB; AAT94022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 307 AA;
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Ouery Match 95.0%, Score 738; DB 12; Length 145; BB BEST Local Similarity 95.0%, Pred. No. 1.4e-95, Indels 0; Gaps Matches 133; Conservative 3; Mismatches 4; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The sequence is an analogue of mature hGG beta subunit having residues 20-22, 24, 25, 73 and 29 replaced by the corresponding residues in the hTSB protein. The chimaelic hormone may as a TSB analogouist for the treatment of hyperthyrotism. See AAR15043, AAR15061-R15125 and AAR15161-R15198
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New glyco-protein hormone analogues - for inducing fertility a immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vacthos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
thyroid stimulating hormone; TSH; CG;
                                                                           Length 145;
                                                                                                             1; Indels
                                                                         Ouery Match 95.0%; Score 738; DB 12; Best Local Similarity 93.6%; Pred. No. 1.4e-59; Matches 131; Conservative 8; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR15089 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Table III; Page 62; 94pp; English.
                                                                                                                                                                                                                                                                                                                    122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                      121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hCG/hTSH chimera, C2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 145 AA;
                                       Sequence 145 AA;
  AAR15161-R15198)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-MAY-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                             62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                     61 DYRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                 The sequence is an analogue of mature hcd beta subunit having residues 59-64.66, 67, and 69 repiaced by the corresponding residues in the hFSH protein. It was prept. by site directed mutagenesis of a coNA sequence encoding the hCo beta subunit. The chimeric hormone is capable of directing hormone binding to both Li and FSH receptors and may be useful for the treatment of infertility in man and women and the promotion of fertility in male and female animais. (see ANR15041, ANR15061-R15125 and
                                 The sequence is an analogue of mature hCG beta subunit having residues 2, 3, 9, 10, 18, and 22 replaced by the corresponding residues in the bowine LH protein. The chimaric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, agonist and/or antagonist.

See AARISO43, AARISO61-R15125 and AARISI61-R15198.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New glyco-protein hormone analogues - for inducing fertility & 
Immuno-castration agents, for suppressing reproductive system 
development and as Immuno-contragestive waccines.
                                                                                                                                                                                                                                      95.1%; Score 739; DB 12; Length 145; 95.7%; Pred. No. 1.1e-59; tive 2; Mismatches 4; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragastive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR15066 standard; Protein; 145 AA.
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Table IV; Page 63; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-FEB-1992 (first entry)
                                                                                                                                                                                                                                      Query Match 95.1%
Best Local Similarity 95.7%
Matches 134; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hcG/hFSH chimera, B6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                    Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
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AAR15066
ID AAR
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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNTR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The sequence is an analogue of mature hCG beta subunit having residues 22, 24, 25, 28, 29, and 33 replaced by the corresponding residues in the hFSH protein. It was preed: by site directed mutagenesis of a cDMA sequence encoding the hCG beta subunit. The Chimeric hormone is capable of directing hormone blanding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female annials. (See AARISO43, AARISO61-RISI25 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chorionic gonadotrophin beta subunit carboxy-terminal loop mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; chorionic gonadotrophin; chorionic gonadotropin; beta-hCG;
                                                                                                                                                                                                                                                                                                                                                         New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                          Glycoprotein Aormone; fertility; immuno-castration;
immuno-contragestive; vacture; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Onery Match
94.74; Score 736; DB 12; Length 145;
Best Local Similarity 95.74; Pred. No. 2.1e-59;
Matches 114; Conservative 2; Mismatches 4; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW27683 standard; protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                          Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                    90US-0520703.
                                                                                                                                                                                                                                                                              (OYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                         91WO-US03162.
                                        11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-JAN-1998 (first entry)
                                                                                                                                                                                                                                                                                                      Campbell RK, Moyle WR;
                                                                  hCG/hFSH chimera, B2.
                                                                                                                                                                                                                                                                                                                                WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 145 AA;
                                                                                                                                                                                                                           07-MAY-1991;
                                                                                                                                                                                                                                                    08-MAY-1990;
                                                                                                                                              Homo sapiens
                                                                                                                                                                                                   14-NOV-1991.
                                                                                                                                                                         W09116922-A.
                 AAR15062;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW27683;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 95.0%; Score 738; DB 12; Length 145; Best Local Similarity 94.3%; Pred. Bo. 7.14e-75; Marches 132; Conservative 4; Mismatches 4; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequence is an analogue of mature hCG beta subunit having residues 62-69 replaced by the corresponding residues in the hTSH protein. The chimeric hormone may be useful as a TSH antagonist for the treatment of hyperthyroidism.

See ARRISO41, ARRISO61-R15125 and ARRIS161-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for supressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                  Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
thyroid stimulating hormone; TSH; GG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 103
AAR15062
ID AAR15062 standard; Protein; 145 AA.
                                                                                                                                           AAR15091 standard; Protein; 145 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Table III; Page 62; 94pp; English.
                                                  122 SKAPPPSLPSPSRLPGPSDT 141
                                                                  121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                                               91WO-US03162.
                                                                                                                                                                                               11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
                                                                                                                                                                                                                         hCG/hTSH chimera, C4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                               07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                        08-MAY-1990;
                                                                                                                                                                                                                                                                                                      Homo sapiens,
                                                                                                                                                                                                                                                                                                                               W09116922-A.
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                                                                                                                                                                       AAR15091;
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The sequence is an analogue of mature hCG beta subunit having residues 77, 82, 83, 89, 91, 22 and 99 replaced by the corresponding residues in the human LH protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in man and female animals.

See AARISO4. AARISO61-RISI25 and AARISIG1-RISI98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New glyco-protein hormone analogues - for inducing fertility & immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                             Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luteinising hormone; LH: GG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 94.6%; Score 735; DB 12; Length 145; Best Local Similarity 95.0%; Pred. No. 2.6e-79; Metches 133; Conservative 3; Mismatches 4; Indels 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
  AAR15116
ID AAR15116 standard; Protein; 145 AA.
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR15109 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                                       07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                          90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                            (UYNE-) UNIV MED NEW JERSEY.
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                                                                                        11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1991-353528/48.
                                                                                                                            hCG/hLH chimera, A3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hCG/eLH chimera, El.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 145 AA;
                                                                                                                                                                                                                                  Homo saptens.
                                                                                                                                                                                                                                                                                                                                                                          08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Campbell RK,
                                                                                                                                                                                                                                                                    WO9116922-A.
                                                                                                                                                                                                                                                                                                     14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR15109;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is the human chorionic gonadotrophin beta subunit (beta-hCG), carboxy-terminal loop mutant Argidiu.

Argidia, Gify-Miss, Val7981s, which can be used in the preparation of a contragestative medicament. The modified beta-hCG has reduced cross-reactivity with luteinising hormone (HH), as defined by the ability of both proteins to react with the same antibody. The modified beta-hCG can be used as a contraceptive in females, in a woachie, in a hCG specific immunosasy and for applications where hCG is active, e.g. Kaposi sarcoma inhibition. The modified on contractive with other natural hormones.

N.B. Sequence not given in the specification, but constructed using the wild type beta-hCG sequence given in nature 307 958460, 37-40 (1984).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 SKEPLAPRCRPINATLAVEKEGCPVCITVNTICAGYCPTWTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
beta subunit; carboxy-terminal loop; mutant; reduction; vaccine; coortragestative medicament; cross-reactivity; luteinising hormone; contraceptive; immunoassay; Kaposl sarcoma; Inhibition; LH; neutralising antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Modified beta-human chorionic gonadotrophin proteins – useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 94.7%; Score 736; DB 18; Length 145; Best Local Similarity 96.4%; Pred. No. 2.1e-59; Matches 135; Conservative 0; Mismatches 5; Indels (
                                                                                                                                                                                                          Misc-difference 70
Misc-difference 75
Misc-difference 75
Misc-difference 79
Misc-difference 79
Misc-difference 79
Misc-difference 79
                                                                                                                                                             Also difference 74
                                                                                                                            Location/Qualifiers
Misc-difference 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example; Page -; 23pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Delves PJ, Lund T, Roitt IM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                                                                                                                                                                           19-JUL-1996; 96WO-GB01717.
                                                                                                                                                                                                                                                                                                                                                                                                                            95GB-0014816.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1997-132639/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DELV/) DELVES P J. (ROIT/) ROITT I M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    145 AA;
                                                                                     Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                      WO9704098-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                            19-JUL-1995;
                                                                                                                                                                                                                                                                                                                                                       06-FEB-1997.
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RESULT 105

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4; Indels 0; Gaps

luteinising hormone; LH; CG; equine; horse.

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"wild-type Pro at position 78 of the beta-
subunit can be replaced by another amino acid
to agree with the glycosylation site motif"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= 'wild-type Asn at position 52 of the alpha-
subunit is opt. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "wild-type Asn at position 78 of the alphasubunit is opt. replaced by another amino acid (esp. Gin) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The single-chain gonadotropin analogue 1b (human CG-beta(1-145) [N13x,N30x,P84x,V951]. Liker-human CG-alpha(1-92)[NSX.N18X]) is an example of a chimaric glycopeptide hormone having an extra glycosylation site. Addition of oligosaccharides has a positive effect on stability of hormones in circulation and can be used to prevent unwanted antibody or receptor interactions. The present analogue has anti-inteninsing hormone (lutropin) activity and can be used for facilitating owulation, terminating pregnancy and reducing androgen secretion.
/label= hCG_beta_subunit_(1-145)
33
/note= "wild-type Asn at position 13 of the beta-
subunit is opt. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site*
                                                                                                                           "wild-type Asn at position 30 of the betasubunit is opt. replaced by another amino acid (esp. Gln) to remove a glycosylation alte"
                                                                                                                                                                                                                                                                                                    Misc-difference 99
/note- "wild-type Val at position 79 of the beta-
subunit is replaced by Thr to agree With
the glycosylation site motif'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating sirvo:protein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 94.3%; Score 714; DB 16; Length 265; Best Local Similarity 96.4%; Pred. No. 6e-59; Makrches 13; Conservative 0; Mismatches 5; Indels (Matches 13; Conservative 0; Mismatches 5; Indels (
                                                                                                                                                                                                                                                                                                                                                                           "Arg corresponds to CCG codon"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 25; Flg 6 and Page 60; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95WO-US02067.
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                                                                                                             50
/note= '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          251
/note-
                                                                                                                                                                                                  Misc-difference 70 /note- '
                                                                                                                                                                                                                                                           /note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 265 AA;
                                                                                                          Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Misc-difference
                     Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-FEB-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-AUG-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                  Region
                                                                                                                                                                                                                                                                                                                                                                                                                   Region
       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Single chain gonadotropin analogue 1b with extra glycosylation site.
                                                                                                                                                                                                                                                                                                                                                                                                                                             The sequence is an analogue of mature hCG beta subunit having residues 40, 42, 45-48, 52, and 55 replaced by the corresponding residues in the equine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, see AARISO43, AARISO61-RISI25 and AARISO61-RISI98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Single chain gonadotropin; human chorionic gonadotropin; hCG;
pcpa; beta; subunit; analogue; glycoprotein hormone; fertility;
inhibit; stimulate; increase; lutropin; luteinising hormone; LH;
follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                            New qlyco-protein hormone analogues · for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match

94.64; Score 735; DB 12; Length 145;
Best Local Similarity 94.34; Pred. No. 2.6e-59;
Best Local Similarity 94.34; Pred. No. 2.6e-59; Indels
Marches 134; Conservative 3; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
1..20
/label- leader
21..165
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                                                                                                                                                                                                                                                                                                                                                                                                                 Table V; Page 64; 94pp; English.
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                                                                                                                                                                                                                                                                       Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                           WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 145 AA;
                                      Homo sapiens.
Equus caballus.
                                                                                                                                                               07-MAY-1991;
                                                                                                                                                                                                  08-MAY-1990;
                                                                                       WO9116922-A.
                                                                                                                           14-NOV-1991.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
Peptide
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0; Gaps

21 SKEPLARPGRPIXATLAVEKEGCPVCITVXTTICAGYCPTMTRULQGVLRALPQVVCNYR 80

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61 DVRFESIRLPGCPRGVNPVVSYAVALSCRCGPCRRSTTSCGGPKDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMMRVLQGALPAPPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequence is an analogue of mature hCC beta subunit having residues 12, 75, 89, 91, 92 and 99 replaced by the corresponding residues in the human LH protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and fee promotion of fertility in male and female and males.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                           Glycoprotein hormone; immuno-castration;
Immuno-contragestive, vaccine; human chorionic gonadotropin;
luteinising hormone; LH; CG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94.2%; Score 732; DB 12; Length 145; 95.0%; Pred. No. 4.9e-59; Live 1; Mismatches 6; Indels
                                             AAR15125 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR15092 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1991; 91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-FEB-1992 (first entry)
                                                                                                                                    11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 95.0
Matches 133; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Moyle WR;
                                                                                                                                                                              hCG/hLH chimera, A10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hcG/hTSH chimera, C5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                  Homo saplens.
                                                                                                                                                                                                                                                                                                                                                               WO9116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                      14-NOV-1991.
                                                                                             AAR15125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR15092;
RESULT 109
AAR15125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 110
AAR15092
ID AAR1509
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
               The sequence is an analogue of mature hCG beta subunit having residues 47.30 deleted and residue 51 changed from alanine to proline. When combined with the alpha subunit this construct has been shown to bind LH receptors and stimulate hos for induced cyclic ANP accumulation at ca. 50% the efficacy of hCG. This reduces the sterologoenic potency of the analogue. It may be useful as an agonist for supression of gonadal activity during chemotherapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels 4; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New glyco-protein hormone analogues - for inducing fertility (
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vactines.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Glycoprotein hormone; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 94.24; Score 732; DB 12; Length 141; Best Local Similarity 96.44; Pred. No. 4, 88-59; Matches 135; Conservative 0; Mismatches 1; Indels 4
                                                                                                                                                                                                                                                               AAR15168 standard; Protein; 141 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Table VII; Page 66; 94pp; English.
                                                                                                                                       141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                            122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     117 SKAPPPSLPSPSRLPGPSDT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                         11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                hCG deletion mutant, F8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 141 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9116922-A.
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                                                                                                                                                                                                                                                                                                               AAR15168;
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90US-0520703.

08-MAY-1990;

us-09-813-398-3.default.rag

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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                           The sequence is an analogue of mature hcG beta subunit having to residues 134-145 deleted. It was pred. using PCR matagenesis to residues 134 and control the gene. It may be useful as an agonist for supression of gonada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New glyco-protein hormone analogues – for inducing fertility as dimuno-castration agents, for suppressing reproductive system dievelopment and as immuno-contragestive vaccines.
                                                                                                                                             New glyco-protein hormone analogues - for inducing fertility (
immuno-castration agants, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                              94.1%; Score 731; DB 12; Length 133; 100.0%; Pred. No. 5.6e-59; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein hormone; immuno-castration;
fimuno-contragestive; vaccine; human chorionic gonadotropin;
luteinisian hormone; Hi; CG.
                                                                                                                                                                                                                        Table VII; Page 66; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 112
AAR15121
ID AAR15121 standard; Protein; 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900S-0520703.
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                                  (UYNE-) UNIV MED NEW JERSEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.0
Matches 133; Conservative
                                                                        Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAPPPSLPSPSR 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 SKAPPPSLPSPSR 133
                                                                                                             WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hcG/hLH chimera, A6.
                                                                                                                                                                                                                                                                                                                                                                           Sequence 133 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-MAY-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the sequence is an analogue of mature hCG beta subunit having residues 74, 75, 77, 78 and 38 replaced by the corresponding residues in the MTSH protein. The chimeric hormone may be useful as a TSH anasonist for the treatment of hyperthyroidism. See AMISIOG14, ARH3061-R13125 and AAR13161-R15198.
                                                                                                                                                                                                                                                                                                                                                                                     New glyco-protein hormone analogues - for inducing fertility a 
immuno-castration agants, for suppressing reproductive system 
development and as immuno-contragestive waccines.
         Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin:
thyroid stimulating hormone; TSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match
94.2%; Score 732; DB 12; Length 145;
Best Local Similarity 95.7%; Pred. No. 4,9e-59.
Makches 134; Conservative 0; Mismatches 6; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR15164
ID AAR15164 standard; Protein; 133 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Table III; Page 62; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 SKAPPPSLPSPSRLPGPSDT 140
                                                                                                                                                                                                                                       90US-0520703.
                                                                                                                                                                                                                                                                          (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                  91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hCG deletion mutant, F4.
                                                                                                                                                                                                                                                                                                             Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                     WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 145 AA;
                                                                                                                                                                                                  07-MAY-1991;
                                                                                                                                                                                                                                       08-MAY-1990;
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                                                                                       Homo saptens.
                                                                                                                                                            14-NOV-1991.
                                                                                                                       W09116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo saptens.
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62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                               61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPRFQDSS 120
                                                                                              Human; chorionic gonadorophin; chorionic gonadotropin; beta hCG; beta subunit; anino terminal loop; mutant; reduction; LH; vaccine; contragestative medicament; cross-reactivity; lucefinish pormone; contraceptive; faminossay; kaposi sarcoma; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence is the human chorionic gonadotrophin beta storic there were the Arcj, amino-terminal loop matchat Lys2Ashr, GluzlArg, Gly2XGlu, ProZAHIS, Val2STyr, Which can be used in the preparation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Modified beta-human chorionic gonadotrophin proteins - useful as contragestative vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                     Chorlonic gonadotrophin beta subunit amino-terminal loop mutant.
                                                                  ö
                                Ouery Match
94.0%; Score 730; DB 12; Length 145;
Peet Local Similarity 94.34; Pred. No. 7.5e-59;
Matches 132; Conservative 3; Mismatches 5; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "wild type Glu replaced with Arg" Misc-difference 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note "wild type Gly replaced with Glu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note- "wild type Pro replaced with His" Misc-difference 15\,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note- "wild type Val replaced with Tyr"
                                                                                                                                                                                                                                                                                                                                     AAW27680 standard; protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example; Page -; 23pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Delves PJ, Lund T, Roitt IM;
                                                                                                                                                                                                                        96WO-GB01717.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-JUL-1995; 95GB-0014816.
                                                                                                                                                                                                                                                                                                                                                                                                   12-JAN-1998 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (DELV/) DELVES P J. (ROIT/) ROITT I M.
    Sequence 145 AA;
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Misc-difference 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo saptens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        W09704098-A2.
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                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                The sequence is an analogue of mature hCG beta subunit having residues 40, 42, 46-48, 51, 52, and 55 replaced by the corresponding residues in the bovine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, see AAR15043, AAR15061-R15125 and AAR15161-R15198.
                           The sequence is an analogue of mature hCG beta subunit having residues 2, 9, 10, 15, 42, 47 and 51 replaced by the corresponding receiptues in the human LH protein. The chimertc hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female animals.

See ARNISOGI-FISIZES and ARRISTER: RISING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New glyco-protein hormone analogues - for inducing fertility a immuno-castration agants, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                        Woley Match

94.1; Score 731; DB 12; Length 145;
Best Local SIMilarity 95.0%, Pred. No. 6.1e-95;
Matches 133; Conservative 1; Mismatches 6; Indels

Matches 133; Conservative 1; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Glycoprotein hormone; immuno-castration;
Immuno-contragestive, vaccine, human chorionic gonadotropin;
luteloising hormone; LH; GG; bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR15099 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Table IV; Page 63; 94pp; English.
Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                   122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                      121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hCG/bLH chimera, D3.
                                                                                                                                           Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAY-1990;
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69 RLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRPQDSSSSKAPPPS 128
                                                                                                                                                                                                                                                                                                                        61 RLPGCPRGVMPVVSYAVALSCQCALCRSTTDCGGPKDPLTCDDPRPQDSSSSKAPPS 120
                                                                                       Gaps
                                                                                                                                                  62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 SKEPLRPRCRPINATLAVEKEGCPVCITVŅTTICAGYCPTMTRVLOGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ន
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luctainising hormone; LH: CG; equine; horse.
                  Length 137;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 93.7%; Score 728; DB 12; Length 145; Best Local Similarity 96.4%; Pred. wo. 1.1e-58; Matches 135; Conservative 0; Mismatches 5; Indels Watches 135; Conservative
         Query Match 93.7%; Score 728; DB 12; Length 13 Best Local Similarity 100.0% Fred. Mc. 1.1e-58; Indels Matches 13; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR15111 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Table V; Page 64; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                        129 LPSPSRLPGPSD 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 LPSPSRLPGPSD 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hCG/eLH chimera, E3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
Equus caballus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR15111;
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1 SKEPLRRFCRPINATLAVERREEHYLIYVNTTICAGYCPTHTRVLGGVLPALPQVVCNYR 61
2 SKEPLRRFCRPINATLAVERREEHYLIYVNTTICAGYCPTHTRVLGGVLPALDQVYCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 94.0%; Score 730; DB 18; Length 145; Best Local Similarity 95.7%; Pred. No. 7.5s-95; Marches 134; Conservative 0; Mismatches 6; Indels 0; Gaps
of a contragestative medicament. The modified beta-hCC has reduced cross-reactivity with lutenhising hormone (LB), as defined by the ability of both proteins to react with the same antibody. The modified beta-hCC can be used as a contraceptive in females, in a vaccine, in a hCG specific immunosasy and for applications where hCG is active, e.g. Kaposi sarcoma inhibition. The modified beta-hCC can produce neutralising antibodies to beta-hCG, which do not cross-react with other natural hormones.

N.B. Sequence not given in the specification, but constructed using the will type beta-hCG sequence given in nature 307 959460, 37-40 (1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The sequence is an analogue of mature hCG beta subunit having residues 1-7 deleted. It may be useful as an agonist for supression of gonadal activity during chemotherapy. See AARIS043, AARIS061-RIS125 and AARIS161-RIS198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Glycoprotein hormone; immuno-castration; immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR15165 standard; Protein; 137 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Table VII; Page 66; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-1990; 90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Campbell RK, Moyle WR;
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                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 137 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 115
AR13165
AC AR1316
AC AR1316
AT AR13
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22 CRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYRDVRESIR 81
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                he sequence is an analogue of mature hCG beta subunit having residues 44-99 delated. It was prepd. using PCR mutagenesis to lineart a stop codon into the gene. It may be useful as an agouist for superasion of gondall activity during remembeherapy. See AARI3043, AARI3061-R15125 and AARI5161-R15199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New glyco-protein hormone analogues - for inducing fertility (
Immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glycoprotein hormone; immuno-castration; immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR15167 standard; Protein; 139 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Table VII; Page 66; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hCG deletion mutant, F7.
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                                                                                                                                                                                                                                               130 PSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                  142 PSPSRLPGPSDT 153
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This sequence represents a human chorionic ganadotrophin (hCG) beta subunit mattern. The invention relates to a method of forming a cysteine subunita mattern. The invention relates to a method of forming a cysteine CK knot protein (1) having alpha and beta-subunits comprising attaching a dimerisation domain (DD) to either the N-termin of both subunits or the dimerising the products to form a heterodiaeric protein analog (II). The method is used to produce analogues (agonists or antagonists) of ceglycosylated giveorotein hormongs, potentially useful, e.g. for treating infertility where caused by polycystic ovarian disease. Cassociated with excessive levels of inteinising hormone). Products that retain DD's are also useful as immunogens or artigens (since a DD may containing highly antigonic amino acid sequences). Attachment of a DD may containing highly antigonic amino acid sequences). Attachment of a DD may containing highly antigonic amino acid sequences). Attachment of a DD may containing night as immunogens or artigens (since a DD may containing highly antigonic amino acid sequences). Attachment of a DD may containing night of activities, and allows the combination of subunits that the subunitary propretein hormone may be modified without loss of activity, and of a tatchment of the DD reduces formation of homodimers. Heterodimers have longer circulation times in vivo than individual subunits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; mutein; Beta subunit; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGVPRHQLTADDPREQDSSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human chorionic gonadotrophin beta subunit mutant.
                                                                                                                                                                                                                                                                                                                                                AAY43266 standard; Protein; 158 AA.
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                                                                                                13-APR-1999; 99WO-US08018.
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N-PSDB; AAZ31734.
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Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                          AAY43266;
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RESULT 119

10 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRFESIR 69

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The sequence is an analogue of mature hCG beta subunit having residues 39, 41-43, 55, 56, and 88 replaced by the corresponding residues in the hFSH protein. It was prepd. by site directed mutagenesis of a cDNA sequence encoding the hCG beta subunit. The chimeric hormone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in man and women and the promotion of fertility in male and female animals. (See AAR1S04). AAR15061-R15135 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                            New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 93.31; Score 725; DB 12; Length 145; Best Local Similarity 95.04; Pred. No. 2.1e-58; Matches 133; Conservative 0; Mismatches 7; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Glycoprotein hormone; fertility; lumuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
             Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; vectore; human chorionic gonadotropin;
Infilite etimulating hormone; FSH; GG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR15064 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                            Table II; Page 61; 94pp; English.
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                                                                                                                                                                                                                                              (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                               91WO-US03162.
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                                                                                                                                                                                                                                                                             Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hCG/hFSH chimera, B4.
                                                                                                                                                                                                                                                                                                              WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 145 AA;
                                                                                                                                                                            07-MAY-1991;
                                                                                   Homo sapiens.
                                                                                                                                                                                                           08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                              14-NOV-1991.
                                                                                                               W09116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequence is an analogue of mature hCG beta subunit having residues 105-107, 10 and 113 replaced by the corresponding residues in the bowine LH protein. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, see AAR15043, AAR15061-R15125 and AAR15161-R15198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New glyco-protein hormone analogues - for inducing fertility as immuno-eastration agonts, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 93.44: Score 226; DB 12; Length 145; Best Local Similarity 96.44; Pred: No. 1.7e-89; Matches 135; Conservative 9; Mismatches 5; Indels (
                                                                                                                                                           Glycoprotein hormone; immuno-castration;
immuno-contragestive, vaccine; human chorionic gonadotropin;
luteinising hormone; LH; GG; bovine.
AAR15104
ID AAR15104 standard; Protein; 145 AA.
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15074 standard; Protein; 145 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Table IV; Page 63; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-MAY-1991; 91WO-US03162.
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                                                                                           11-FEB-1992 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hCG/hFSH chimera, B14.
                                                                                                                            hCG/bLH chimera, D8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                         08-MAY-1990;
                                                                                                                                                                                                                          Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                          WO9116922-A.
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                                                           AAR15104;
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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPIMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                        The sequence is an analogue of mature hCG beta subunit having residues 42, 47, 51, 77, 87, 89, 91, 92, and 99 replaced by the corresponding residues in the human LH protein. The chimmeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female animals. See AAR1904, AAR15061-RISI25 and AAR15161-RISI98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New glyco-protein hormone analogues for inducing fertility as
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                  New glyco-protein hormone analogues - for inducing fertility a 
immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The sequence is an analogue of mature hCG beta subunit having residues 73.81, and 83 replaced by the corresponding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Onery Match of Ones 141, Score 718, DB 12; Length 145; Best Local Similarity 92.94, Pred No. 9.2e-58; Matches 130; Conservative 3; Hismatches 7; Indels Matches 130; Conservative 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR15067 standard; Protein; 145 AA.
                                                                                                                                                                                                                          Table VI; Page 65; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hCG/hFSH chimera, B7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo saptens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-MAY-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9116922-A.
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AAR15067
ID AAR1506
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The sequence is an analogue of mature hCG beta subunit having residues in the hF8H procedor. We are success in the hF8H proceding the was prepal by site directed mutagenesis of a cDNA sequence encoding the hCG beta subunit. The chimeric hormone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the proceding of fertility in male and female animals. (See AARISO4), AARISO61-RISISS and AARISO61-RISISS and AARISO61-RISISS and AARISO61-RISISS and AARISO63-RISISS and AARISO63-R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Gaps
                                                                                                                                                                                                                                                                                                                                                                          New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Q2.41; Score 718; DB 12; Length 145;
Best Local Similarity 94.44; Pred. No. 9,2e-89
Matches 134; Conservative 1; Mismarches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Glycoprotein bormone; immuno-castration;
immuno-contragestive, vaccine; buman chorionic gonadotropin;
luteinising hormone; LH; GG.
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                                                                 91WO-US03162.
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                                                                                                                                                                                                                                                   Campbell RK, Moyle WR;
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                                                                                                                                                                                                                                                                                                            WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 145 AA;
                                                         07-MAY-1991;
                                                                                                                       08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-MAY-1991;
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14-NOV-1991.
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AAR15122
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Gaps
                                                            2 SKEPLRERER HATLAVERESCHYCITVHTTCACYCPHTRYLOGYVAALROVYCHT 61
1 SKEPLRERER PINATLAVERESCHYCITVHTTLAGTCPHTRYLOGYLLANDOVYCHTR 60
2 SKEPLRERER PINATLAVERESCHYCITVHTTLAGTCPHTRYLOGYLLANDOVYCHTR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7; Indels 0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTHTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              by the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The sequence is an analogue of mature hCG beta subunit having residues 2, 8, 10, 15, 77, 84, 83, 19, 91, 92 and 99 replaced by corresponding residues in the human LH protein. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female animals. See ARISO43, ARISO61-RISI23 and ARISI61-RISI38
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New glyco-protein hormone analogues – for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91.8%; Score 713; DB 12; Length 145; 92.1%; Pred. No. 2.6e-57; trive 4; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone; immuno-castration;
Immuno-contragestive, vaccine; human chorionic gonadotropin;
lutekinising hormone; LH: GG.
     Local Similarity 93.7%; Pred. No. 1.9e-57; es 133; Conservative 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                           AAR15124 standard; Protein; 145 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                        120 SSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                               118 SSSKAPPPSLPSPSRLPGPSDT 139
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Best Local Similarity 92.1%
Matches 129; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hCG/hLH chimera, A9.
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AAR15124
ID AAR1512
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                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                61 DVRFESIRLPGCAHHADSLYTYPVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 120
                                                                                                                                                                                                                                                                                                                                                           62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                            2 SKEPLRPRREDIONALLAVERSCHYCTIVNTTICAGKCPTNTRVLOGVLPALPOVVCHYR 61
1 SKEPLRPRCREDIANTLAVERSCHYCTYNTTICAGKCPTNTRVLOGVLPALDOVVCHYR 60
                                                                                                                                                                                                                                       7; Indels Q; Gaps
residues in the hESH protein. It was prepd by site directed mutagenesis of a cobh sequence encoding the hCG bets subnit.

The Chimaric bramen is capable of directing hormone binding to both us and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15043, AAR15061-R15125 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequence is an analogue of mature hCG beta subunit having residues 89, 91, 92, and 95-99 replaced by the corresponding residues in the hTSH protein and residue 94 deleted. The chimeric hormone may be useful as a TSH antagonist for the treatment of hyperthyroidism. See ARMISO41, AARISO61-RISI23 and AARIS161-RIS198.
                                                                                                                                                                                                   Ouery Match 92.18; Score 716; DB 12; Length 145; Best Local Similarity 92.19; Pred: No. 1.44-57; Matches 10; Conservative 3; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
thyroid stimulating hormone; TSH; GG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR15093 standard; Protein; 144 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Table III; Page 62; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hCG/hTSH chimera, C6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1991-353528/48.
                                                                                                                                                              Sequence 145 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9116922-A.
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DB 12; Length 144;

92.0%; Score 714.5;

Query Match

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This sequence is a fusion protein of Hill/HCC and Jun. The invention relates to a method of forming a cysteline knot protein (1) having alpha and beta-subunits comprising a traching a dimerisation domain (DD) to ceither the N-termin of both subunits of the both subunits of the products to form a heterodimeric protein analog (II). The method is about to do form a heterodimeric protein analog (II). The method is used to produce analogues (aspoils to or integonits) of deglycosylated cyproprotein normones, proteinially useful, e.g. for treating infartility (where caused by polycystic ovariand disease (associated with excessive contents of intennising hormone). Products that retain DD's are also useful as immnogens or antigens (almee a DD may contenting) highly antigent earlino acid sequences). Attachment of a DD (Which may be removed later) and thus receptor-binding and immunogenic properties) to native dimers, and allows the combination of subunits that would otherstee combination of subunits that would otherstee combination of subunits that would otherstee complication times in complete the completed in the produces of committed the subunitation of homodimers. Heterodimers have laid the produces of committed and the subunities.
                                                                                                     Cystaine knot protein; protein formation; heterodimento protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Methods for producing heterodimers, particularly analogues of hormones from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 90.5; Score 713; DB 20; Length 209; Best Local Similarity 90.78; Pred. No. 3.16-56; Matches 127; Conservative ; Mismatches 8; Indels Matches 127; Conservative 5; Mismatches 8; Indels 9.
                                                                 HLH/HCG beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 7; Fig 20; 73pp; English.
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                          19-JAN-2000 (first entry)
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                                                                                                                                                                                                                                                                                              W09953065-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                           14-APR-1998;
                                                                                                                                                                                                                            Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                               13-APR-1999;
                                                                                                                                                                                                                                                                                                                                           21-0CT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Moyle WR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 DVRFESIRLPGCPRGVNPVVSTAVALSCOCALCRRSTTDCGGPRDHPLTCDDPRFODSSS 121 DVRFESIRLPGCPRGVNPVSTAVALSCOCALCRRSTTDCGTPRGGGSSTDDPRFQDSSS 120 DVRFESIRLPGCPRGCPRGVPRVSTAVALSCOCALCRRSTTDCGTPTRGGGSTVDDPRFQDSSS 120 DVRFESIRLPGCPRCVPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The sequence is an analogue of mature htt pets subunit having residues 102-107, 109 and 110 replaced by the corresponding residues in the hFSH protein. The chimeric hormone is capable off affecting hormone blading to both if and FSH receptors and may be extended for the treatment of infertility in men and women and the promotion of fertility in men and women and the promotion of fertility in main and female animals. (See AAR15043, AAR15061-R1515 and AAR15161-R15199).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New glyco-protein hormone analogues - for inducing fertility e
immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive wacotnes.
                                                                                                                                                                                                                                                                                                                                     Glycoprotein hormone: fertility; immuno-castration;
Immuno-contragestmone; vaccine; human chorionic gonadotropin;
Indilicie stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 127
AAX43300
ID AAX43300 standard; Protein; 209 AA.
X AAX43300;
                                                                                                                                                        AAR15080 standard; Protein; 145 AA.
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                                                                                                                                                                                                                                           11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                           hCG/hFSH chimera, B20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-MAY-1990;
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Query Match 90.0%; Score 699; DB 12; Length 145; Best Local Similarity 93.6%; Pred. No. 4.9e-68; Best Local Similarity 93.6%; Pred. No. 4.9e-68; Indels 0; Gaps Matches 131; Conservative 1; Mismatches 8; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                    The sequence is an analogue of mature hCC beta subunit having residues 102-110 replaced by the corresponding residues in the hTSH procedur. The chimeric hormone may be useful as a TSH antagonist for the treatment of hyperthyroidism.
                                                                                                                                                                                                                                                                                               New glyco-protein hormone analogues . for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
 Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccine; human chorlonic gonadotropin;
thyroid stimulating hormone; TSH: GG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glycoprotein hormone; fertility; Immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
thyroid stimulating hormone; TSH; GG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15088 standard; Protein; 138 AA.
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                                                                                                                                                 91WO-0S03162.
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                                                                                                                                                                                                                                        Campbell RK, Moyle WR;
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                                                                                                                                                                                                                                                                      WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 145 AA;
                                                                                                                                                 07-MAY-1991;
                                                           Homo sapiens.
                                                                                                                                                                               08-MAY-1990;
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                                                                                        WO9116922-A.
                                                                                                                    14-NOV-1991.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The sequence is an analogue comprising amino acids 7-145 of mature hGG beta subunit having residues 7, 8, 10, 11, 12, 14, 16, and 18 replaced by the corresponding residues in the hFSH proceso. It was prepd by site directed mutagenesis of a cDNA sequence encoding the hGG beta subunit. The chimerit horamone is capable of directing horamone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15043, AAR15062-R15125 and AAR15161-R15198).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 CRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALDQVVCNYRDVRFESIR 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New qlyco-protein hormone analogues - for inducing fertility as immuno-casiration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                  Glycoprotein hormone, fertility, immuno-castration;
immuno-contragestive, vaccine, human chorionic gonadotropin;
follicie stimulating hormone; FSR; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

Q0.11; Score 700; DB 12; Length 139;
Best Local Similarity 95:51; Pred. No. 3.8e-56;
Matches 126; Conservative 2; Mismarches 4; Indels
AAR15061 standard; Protein; 139 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR15094 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                           (UYNE-) UNIV MED NEW JERSEY.
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                                                       11-FEB-1992 (first entry)
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                                                                                                                                                                                                                                                                                                                                                        Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             130 PSPSRLPGPSDT 141
                                                                                    hCG/hFSE chimera, Bl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123 PSPSRLPGPSDT 134
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                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 139 AA;
                                                                                                                                                                                                                                                                                             08-MAY-1990;
                                                                                                                                                                           Homo sapiens.
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                           AAR15061;
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The sequence is an analogue of mature hCG beta subunit having residues yes. 19.41.43, and 45-53 replaced by the corresponding residues in the hESH protein. The chimeric hormone is capable of directing hormone blading to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animais. (See AAR15043, AAR15061-RIS125 and AAR15061-RIS125 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                             The sequence is an analogue of mature hCC beta subunit having residues 94-96, 103-105, 107, 110 and 112-115 replaced by the corresponding residues in the equine LH protein. The chimaric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, agoints and/or andson/18t.
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limmuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Glycoprotein hormone; fertility; immuno-castration;
Immuno-contragestive; waccher; human chorionic gonadotropin;
follicle stimulating hormone; FSH; GG;
                                                                                                                                                                                                                                                                                                          Length 145;
                                                                                                                                                                                                                                                                                                       Query Match 69.3%; Score 694; DB 12; Length 14; Best Local Similarity 92.1%; Pred. No. 1.4e-55; Matches 12; Conservative 2; Mismatches 9; Indels
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                                 Table V; Page 64; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR15084 standard; Protein; 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hCG/hFSH chimera, B24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1991-353528/48.
                                                                                                                                                                                                                                                             Sequence 145 AA;
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AAR15084
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                                                                                                                                                                                                                                                                                                                       The sequence is an analogue of mature hCG beta subunit having residues 1.7 deleted and residues 8, 10, 12.14 and 16.18 replaced by the corresponding residues in the hTSE protein. The chimeric hormone may be useful as TSE integrated to the treatment of hyperthyroidism. See AARISO4. ANISO61-815125 and AARISIG1RS198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10 CRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRDVRFESIR 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 CIPTEYINHIEKEGCPVCITVNTTICAGYCPIMTRVLQGVLPALPQVVCNYRDVRESIR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New qlyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                New glyco-protein hormone analogues - for inducing fertility a immuno-costration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
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89.34; Score 694; DB 12; Length 138;
Best Local Similarity 94.74; Pred. No. 1.13e-55;
Makethes 125; Conservative 2; Mismarches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
luteinising hormone; LH; CG; equine; horse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR15113 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                         Table III; Page 62; 94pp; English.
   90US-0520703.
                                             (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-FEB-1992 (first entry)
                                                                                           Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 130 PSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122 PSPSRLPGPSDT 133
                                                                                                                                   WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hCG/eLH chimera, E5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 138 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
Equus caballus.
08-MAY-1990;
                                                                                           Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR15113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 131
AAR15113
ID AAR151;
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(especially post-conception). The adapted peptides allow production of vaccines from endogenous proteins, which are not normally immunogenic.
                                                                                                                                                                                                                            Score 687.5; DB 19; Length 132;
Pred. No. 4.9e-55;
0; Mismatches 0; Indels 13; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The sequence is an analogue of mature hCG beta subunit having residues 39, 41-50, 53, 55 and 88 replaced by the corresponding residues in the hTSH protein and the sequence LFL from hTSH inserticed in place of residue 47. The chimeric hormone may be useful as a TSH antagonist for the treatment of hyperthyroidism. See AARISO61-R15125 and AARIS161-R15196.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 SKEPLEPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQG--VLP--ALPQVV 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glycoprotein hormone; fertility; lamuno-castration;
limmuno-contrageslive; vaccine human chorionic gonadotropin;
thyrold stimulating hormone; TSH: CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Onery Match 88.2%; Score 685; DB 12; Length 147; Best Local Similarity 91.0%; Pred: No. 9.2e-55; Matches 11; Conservative 1; Mismatches 6; Indels 6
                                                                                                                                                                                                                                                                                                                                                                                                                           AAR15090 standard; Protein; 147 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Table III; Page 62; 94pp; English.
                                                                                                                                                                                                                                                                                                     122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                      108 SKAPPPSLPSPSRLPGPSDT 127
                                                                                     Query Match 88.5%;
Best Local Similarity 90.7%;
Matches 127; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91WO-US03162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hCG/hTSH chimera, C3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 147 AA;
                                                    Sequence 132 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9116922-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR15090;
                                                                                                                                                                                                                                                                                                                                                                                        RESULT 134
AAR15090
ID AAR1509
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents the human chorionic gonadotropin (HCG) beta subunit. The antigenic peptides of the invention are synthetic analogues of regions of this sequence. The peptides are preferably analogues of HCG beta residues 38-57. The invention provides a method for the antigenic modification of peptides. The peptides can then be coupled to carrier elicit anti-HCG antibodies (but at a lower level than the native peptide) and do not elicit antibodies (but at a lower level than the native peptide) and do not elicit antibodies to human luterinising hormone. The conjugates that a method for vaccine development or to produce polyclonal antisera for danostic assays. Depending on the peptides used, the vaccines can be used to treat hormone and endocrine related tumours, cancers, and characterising (especially using anglotensin related peptides), and diabetes and associated vascular diseases, or as anti-pregnancy vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antigenic peptide; HCG; human chorionic gonadotropin; vascular disease; antigenic modification; immunogenic conjugate; vaccine development; anti-pregnancy vaccine; hormone related tumour; endocrine related tumour; cancer; hypertension; angiotensin; diabetes; therapy.
                                                                                                                                                                                             Query Match 88.7%; Score 669; DB 12; Length 145;
Best Local Similarity 91.5%; Pred, No. 3, 9-55; De 156;
Matches 310; Conservative 1; Mismatches 7; Indels 4; Gaps
                                                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALP--QVVCN 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Modified human chorionic gonadotrop\( n\) beta sub:unit peptide(s) -
mestul for producting immunogenic conjugates with proteins that are
not normally immunogenic, for use as yaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human chorionic gonadotropin beta subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Column 19; 81pp; English
                                                                                                                                                                                                                                                                                                                                                       RESULT 133
AAM69449
ID AAM69449 standard; peptide; 132 AA.
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85US-0804642.
87US-0086401.
92US-0958601.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1998-556460/47.
                  Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-OCT-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-AUG-1989;
04-DEC-1985;
17-AUG-1987;
06-OCT-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US5817753-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stevens VC;
                                                                                                                                                                                                                                                                                                                                                                                                                           AAW69449;
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the invention relates to the production of analogues of a heterodimeric subunit glycoporotein hormone (GPR) e.g. human chorionic gonadotropin of (hCG), human lutenising hormone (HFSH), human flytoid stimulating hormone (hFSH), and functional muterins, which are modified to contrain an intersubunit distipline boad, between an alpha-subunit cystelia and iterasubunit cysteliae, for improved stability, the analogue retaining at least a portion of the injocativity for the corresponding native GPH receptor. This sequence to represents a chimaric horgyles are designed specifically to reduce perturbation of the Jupoved analogues are designed specifically to reduce perturbation of the Jupoved analogue stabilise for the hormone, thereby creating greater likelihood that the dimer vill be formed in vivo and the formed dimer will have affinity for the native receptors and have gastistic activity on them. The changes stabilise the GPHs and prolong the biological activities of the hormones. The analogues can have uses
                                                                                                                                                          Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human tocrionic gonadotropin; human lutelnising hormone; disulphide bond; human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGTCPPMTRULGGULPALPQVVCNTR 61
11 SKEPLRPRCRPINATLAVEKEGCPVCITVNTICAGTCPPHTRULGGULPALPQVVCRTR 80
1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTICAGTCPPHTRULGGULPALPQVVCRTR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New stabilised glycoprotein hormones - particularly hCG, htH, hFSH or infrst, have an intersubunit distulphide crosslink between the alpha- and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   86.9%; Score 675; DB 20; Length 165; 91.4%; Pred. No. 8.4e-54;
Live 0; Mismatches 12; Indels
                                                                                                                        hCG/hFSH chimeric beta subunit CFC101-114-beta'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Fig 10A; 139pp; English.
  AAW99535 standard; Protein; 165 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-US13070.
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                                                                                08-JUN-1999 (first entry)
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Best Local Similarity 91.4
Matches 128; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 165 AA;
                                                                                                                                                                                                                                                             Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                        25-JUN-1998;
                                                                                                                                                                                                                                                                                                                          W09858957-A2.
                                                                                                                                                                                                                                                                                                                                                                  30-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moyle WR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
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                                     1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYC - MTRDINGKLFLPKYALSQDV 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 86.9%; Scord 675; DB 12; Length 123; Best Local Similarity 100.0%; Pred. No. 6.2e-54; Matches 123; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The sequence is an analogue of mature hCG beta subunit having residues 124'14 deleted. It was prepd. using PCR mutagenesis to insert a stop coolon into the gene. It may be useful as an agonist ca supression of general activity during hemotherapy. See ANISO43, ANISO61-R15125 and AANISI61-R15199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New glyco-protein hormone analogues - for inducing fertility (
immuno-casitation agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                           Glycoprotein hormone; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                             AAR15163 standard; Protein; 123 AA.
                                                                                                                  118 DSSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                             119 DSSSSKAPPPSLPSPSRLPGPSDT 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Table VII; Page 66; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                  hCG deletion mutant, F3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                             11-FEB-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 SKA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              111 SKA 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-NOV-1991.
                                                                                                                                                                                                                                                                                                     AAR15163;
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0; Gaps

bond;

hCG/hFSH chimeric beta subunit CFC101-114-beta'099C.

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The invention relates to the production of analogues of a heterodimeric subunit giycoportein hormone (GPH) a.9. human chorionic goadedcropin (CC (hCG), human interialising hormone (HCH), human interialising hormone (HCH), human interialising hormone (HCH), human interialising hormone (HCH), human follicle stimulating contents, which are modified to contain an intersubunit disulphide bond, between an alpha-subunit cysteine and a beta-subunit cysteine, for improved stability, the analogue retaining at least a portion of the blacktivity for the corresponding native GPH receptor. This sequence cepresents a mutant chimeric hGCAPEH's beta subunit used for generating the modified GPHs. The improved analogues are designed specifically correcting greater likelihood that the dimer will be formed in vivo and the formed dimer will have affinity for the native receptors and have sequence catevity on them. The changes stabilise the GPHs and prolong the biological activities of the hormones. The analogues can have uses
                                   Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; hhuman chorionic gonadortopin; human lutelainsing hormone; disulphide bon human follicle stimulating hormone; human thyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62 DVRFESIRLPGCPRCVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH or Integral or intershulut disturbhide crosslink between the alpha- and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Watch
Bost Local Similarity 90.7%; Pred. No. 1.99-37;
Watches 127; Conservative 1; Mismatches 12; Indels (
                                                                                                                                                                                                                                                                                                                                      (ISTE ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 139
AAN15166
ID AAN15166 standard; Protein; 128 AA.
XX AAN15166;
AC AAR15166;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig 21; 139pp; English.
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                                                                                                                                                                                                                                                                                                          9705-0050784.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 165 AA;
                                                                                                                                                                                                                                                                                                          25-JUN-1997;
                                                                                                                                      Homo sapiens.
Synthetic.
                                                                                                                                                                                           W09858957-A2.
                                                                                                                                                                                                                                                                    25-JUN-1998;
                                                                                                                                                                                                                                 30-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                      Moyle WR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The sequence is an analogue of mature hCG beta subunit having residues 39, 41-43, 45-55, 55, 56, and 58 replaced by the corresponding residues in the hESI protein. It was prepd. by site directed mutagenesis of a cDNA sequence encoding the hCG beta subunit. The chimeric hormone is capable of directing hormone bluding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and feale animals. (See AAR1504), AAR15061-R15125 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery watch 86.7%; Score 674; DB 12; Length 145; Best Local Similarity 88.7%; Pred. No. 99-54; Best Local Similarity 88.7%; Pred. No. 99-54; Marches 126; Conservative 3; Mismatches 9; Indels 4; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New glyco-protein hormone analogues - for inducing fertility immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                        Glycoprotein hormone: fertility; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
folitole stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR15075 standard; Protein; 145 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120 SSSKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                    91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                       90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UYNE-) UNIV MED NEW JERSEY.
                                                                                                               11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Campbell RK, Moyle WR;
                                                                                                                                                     hCG/hFSH chimera, B15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                    07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAY-1990;
                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                        W09116922-A.
                                                                                                                                                                                                                                                                                                                                              14-NOV-1991.
                                                                            AAR15075;
RESULT 137
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30-DEC-1998.

11-FEB-1992 (first entry)

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the invention relates to the production of analogues of a heterodimeric subunit giycoprotein hormone (GPH) a.9. Awam ofboiloic gondoficiopin (bCG), human luteinising hormone (HeH), human follicle stimulating hormone (HeH), human follicle stimulating hormone (HeH), human follicle stimulating connece (HeH), human follicle stimulating more decided to contain an intersubunit disuphide bond, between an alpha-subunit cysteine and a beta-subunit disuphide bond, controved stability, the analogue retaining at least a portion of the improved stability, the analogue retaining at least a portion of the colorabonding native GPH receptor. This sequence crepresents a mutant chimaric hock/heH; beta subunit used for generating to reduce perturbation of the 3-dimensional structure of the hormone, to reduce perturbation of the 3-dimensional structure of the hormone, condition of the 3-dimensional structure of the hormone, the bloogical activity on them. The changes stabilise the GPHs and prolong as for the native GPHs and prolong as for the native GPHs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match 85.7%; Score 666; DB 20; Length 165; Beset Local Similarity 90.7%; Pred. No. 5.5e-53; Matches 127; Conservative 0; Mismatches 13; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New stabilised glycoprotein hormones - particularly hCG, hLH, P
or hTSH, have an infersibunkt disuiphide crosslink between the
alpha - and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein hormone; fertility; Immuno-castration;
Immuno-contrageslive; vaccine; human chorlonic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                              (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Fig 10B; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR15072 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98WO-US13070.
                                                                                                                                                      25-JUN-1997; 97US-0050784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hCG/hFSH chimera, B12.
                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 165 AA;
                                                                                     25-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09116922-A.
                                                                                                                                                                                                                                                                                                                 Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15072;
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ARESOLT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 85.8%; Score 666.5; DB 12; Length 128; Best Local Similarity 87.3%; Pred. No. 3.8e-53; Ondels 17; Gaps Matches 123; Conservative 0; Mismatches 123; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequence is an analogue of mature hCG beta subunit having residues 39-55 deleted. It was preped using PCR mutagenessis to Insert a stop codon into the gene. It may be useful as an agonist it is supression of gonadal activity during themotherapy. See AMISO3, AMISOS-RISI23 and AMISIGI-RISI99.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New glyco-protein hormone analogues - for inducing fertility of immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive wactines.
                                                                                                               Glycoprotein hormone; immuno-castration; immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hCG/hFSH chimeric beta subunit CFC101-114-betaY37C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW99536 standard; Protein; 165 AA...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Table VII; Page 66; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAY-1990; 90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                               07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-JUN-1999 (first entry)
                                               hCG deletion mutant, F6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 128 AA;
                                                                                                                                                                                                                  Homo sapiens.
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Synthetic.
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AAW99536
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The invention relates to the production of analogues of a heterodimeric subunit giycoporotein hormone (GFB) a.9. Imman chorionic gonadotropin (bCG), human intensials promone (HBB), human follicle stimulating hormone (HBB), human follicle stimulating hormone (HBB), human follicle stimulating contense (HBB), human follicle stimulating matterials, which are modified to contain an intersubunit disulphide bond, between an alpha-subunit cysteine, for the cortesponding article GBH septimulating, the nanlogue retaining at least a portion of the bioactivity for the corresponding native GBH seeptor. This sequence cortexpresents a material Angelia and for the general and perfect of the formone, the major of the 3-dimensional structure of the hormone, thereby creating greater likelihood that the dimer will be formed in vivo and the formed dimer will have affinity for the native receptors and have against a cativity on them. The changes stabilise the GPHs and prolong as for the native GPHs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 84.2%; Score 654; DB 20; Length 142; Best Local Similarity 98.4%; Pred. No. 5.8e-52; Indels 0; Gaps Matches 120; Conservative 0; Mismatches 2; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21 SKEPLCPRCRPINATLAVEKEGCPVCITVNTTICAGCCPTMTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2. SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                        New stabilised glycoprotein hormones - particularly hCG, hLH, hFSH or hTSH, have an intersubult distubhide cossilnk between the olpha and beta subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                 (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                 Example 15; Page 97; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR15076 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         91WO-US03162.
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                                                                                                                               WPI; 1999-081219/07.
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| 141 SK 142
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                        Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR15076;
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AAR15076
ID AAR1507
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 84.8%; Score 659; DB 12; Length 145; Best Local Similarity 89.3%; Pred. No. 2.1e-2; Marches 125; Conservative 2; Mismatches 13; Indels. 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 SKEPLRPRRRINGTAVERESCPYCITVNTICAGYCPTNTRVLGOVLPALPQVVCNYR 61
1 SKEPLRRRRPRATAVERESCPYCITVNTICAGYCPTNTRVLGOVLPALDOVVCNYR 61
2 SKEPLRRRPRATAVERESCPYCITVNTICAGYCPTNTRVLQOVLPALDOVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                 The sequence is an analogue of mature hCC beta subunit having testlues 102-107, 109 110, and 112-118 replaced by the corresponding residues in the hFSH protein. It was prept. By site directed mutagenesis of colks sequence encoding the hCC beta subult. The and FSH receptors and may be useful for the treatment of both its min and women and the promotion of fartility in male and may be useful for the treatment of infertility and female animals. (See AARISO43, AARISO61-R15123 and
                                                                                                                                                                                                                                                                                     New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glycoprotein hormone analogue hCG-beta'-R6C, Y37C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW99526 standard; Protein; 142 AA.
                                                                                                                                                                                                                                                                                                                                                                        Table II; Page 61; 94pp; English.
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                                                                                                          90US-0520703.
                                                              91WO-US03162.
                                                                                                                                                   (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                                                             Campbell RK, Moyle WR;
                                                                                                                                                                                                                                         WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 145 AA;
                                                           07-MAY-1991;
                                                                                                          08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W09858957-A2.
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Synthetic.
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The sequence represents the amino acid sequence of single chain good of the sequence represents the amino acid sequence of single chain goodsdroptin analogue 12. The givocoprotein homomon analogue 13. The givocoprotein homomon and out of the conditions of the homomon caseful for generating antibodies specifically immunoraactive with new compounds, as a substitute for the heterodinarie of the homomon of the treatment of infertility, as an aid for in vivo fertilisation techniques, and in other therapeute methods associated with the native confiners similar to the heterodinary as a disponsatic tool to detect the confiners and in other therapeuter to the native protein in the presence of antibodies with respect to the native protein in the longical samples, as a control reagent in assay kits for assessing the presence of antibodies with respect to the native proteins in the puritying receptors to which the native homomons bind: The single chain forms of the heterodimers or homodamers have the following advantages over their dimeric forms: they are more stable, problems of recombinant protein are reduced since only a single chain forms cuning of activity levels and of in vivo half lives. Single chain forms care unique starting materials for identifying truncated forms with the activity of the dimer. The linkage between the subunits permits the cattvity of the dimer. The linkage between the subunits permits the protein to be engineered without disturbing the overall folding of the
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                                                                                                                     New single chain forms of the glycoprotein hormone quartet useful for generating antihooles specifically immunoreactive with the new compounds in treating infertility, or as aids for in vivo fertilization techniques
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match
Best Local Similarity 95.2%; Pred. No. 3.46-51.
Best Local Similarity 95.2%; Pred. No. 3.46-51.
Arches 118; Conservative 0; Mismatches 6; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human single chain gonadotropin analog no: 2.
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21..134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAE04475 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                         Example 6; Fig 6; 86pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-SEP-2001 (first entry)
                                               WPI; 2001-424301/45.
N-PSDB; AAS08487.
Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141 GSAP 144
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Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAE04475;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
Region
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                                                                                                                                                                                                                                                                                                                                           The sequence is an analogue of mature hCG beta subunit having residues 39, 41-43, 45-55, 55, 56, 58, and 44-97 replaced by the corresponding residues in the hESH protein. It was pread, by site directed mutagenesis of a cOMA sequence encoding the hCG beta subunit. The chimeric hormone is capable of directing hormone binding to both LH and RSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AARISO43, AARISO61-R15125 and AARIS161-R15199).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60 YRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDS 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            59 YRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCDSDSTDCGGPKDHPLICDDPREQDS 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; glycoprotein hormone; infertility; in vivo fertilisation;
single chain gonadotropin.
                                                                                                                                                                                    New glyco-protein hormone analogues - for inducing fertility a immuno-castration agents, for appressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 633: DB 12: Length 145; Best Local Similarity 85.98; Pred. No. 7.3e-52; Matches 122; Conservative 4; Mismatches 12; Indels ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Single chain gonadotropin analogue #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAU04603 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                               Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-0918288.
94US-0199382.
94US-0289396.
94US-0334628.
94US-0351591.
95US-0475649.
                      (UYNE-) UNIV MED NEW JERSEY.
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                                                                     Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UNIW ) UNIV WASHINGTON
                                                                                                                                WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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18-PEB-1994;
12-SEP-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAX-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUN-2001.
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                                                                             NAME OF THE PARTY 
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0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New glyco-protein hormone analogues - for inducing fertility .
Immuno-castration agents, for uppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein hormone; immuno-castration; immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 82.94; Score 644; DB 12; Length 116; Best Local Similarity 100.04; Pred. No. 3.8e-51. Makethes 116; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HCG/hFSH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                AAR15162 standard; Protein; 116 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900S-0520703.
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                                                                                                                                                                                                                                                                                                                 11-FEB-1992 (first entry)
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                                                                                                                                                                                                                                                                                                                                                          hCG deletion mutant, F2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 116 AA;
                                                                        122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAY-1990;
                                                                                                                 141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
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                                                                                                                                                                                                                                                                         AAR15162;
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                                                                                                                                                                                 RESULT 147
AAY4328
XX
XX
AC AAY4328
XX
XX
DF 19-JAN-
DE HCG/hFS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to human single chain forms of the glycoprotein character of common quarter which is an agonist or antagonist of lucial sing hormone consomment of common quarter which is an agonist or antagonist of lucial single hormone (Lis), follicle stimulating hormone (C. 19.), follicle stimulating hormone see the stimulating hormone see the consomment of single chain hormones are used in treating infertility, as adds forms of single chain hormones are used in treating infertility, as adds in vitro fertilization techniques, and other therapeutic methods associated with the native hormones. The single chain hormones are useful as reagents in a manner similar to heterodimers, as diagnostic tools to detect the presence of antibodies with respect to the native proteins in bloogical samples, as control reagents in assay ties for assessing the levels of these hormones in various samples, in detecting and puritying receptors to which the native hormones bind; the single chain hormones are also used in affairly chromatographic preparation of receptors or continuous and into the native preparations of these materials and to monitor subsequent bergans as puritication tools for solution of subsequent preparations of these materials and to monitor isolation of subsequent preparations of these materials and to monitor of the preparation of subsequent preparations of these materials and to monitor of subsequent beginner of supplement of single chain hormones administered as dugs. The single chain of subsequent expense the present sequence is highman single chain quage to the networdiment forms of hormone are also an original constant of the invention. Analog no: 2 is a fusion protein constant of the invention of subsequent of hormone expective this smallog serves as a useful starting compound for template directed vaccine design and for the development of hormone-specific vaccine design and for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
/note= "Corresponds to 1-114 amino acids of human choice donotonic gonadotropin (CG) beta-subunit* 115...147
/note= "Linker peptide" 143...234
/note= "Corresponds to 1-92 amino acids of human single chain gonadotropin alpha-subunit*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Watch 83.4%; Score 648; DB 22; Length 234;
Best Local Similarity 95.2%; Pred. NO. 3.44-51;
Matches 118; Conservative 0; Hismatches 6; Indels 0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the netive hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 9; Fig 6; 87pp; English.
                                                                                                                                                                                                                                                                                                      94US-0199382.
94US-0289396.
94US-0310590.
94US-031628.
94US-013591.
95US-0475049.
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N-PSDB; AAD08787.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bolme I, Moyle WR;
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                                                                                                                                                                                                                                                                                                         18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                              US6238890-B1.
                                                                                                                                                                                                                                                                   25-AUG-1997;
                                                                                                                                                                                                                          29-MAY-2001.
                                              Region
                                                                                             Region
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19-JAN-2000 (first entry)

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This sequence is a fusion protein of hcc/HESH and Jun. The invention relates to a method of forming a cysteine knot protein (1) having alpha can beta-subunits comprising a tysteine knot brotein (1) having alpha can beta-subunits comprising attaching a dimerisation domain (DD) to either the N'terminio for both subunits or the N-terminios of the cathorian of the C-terminios of the cathorian and timerising to the products to form a heterodimeric protein analog (II). The method is the products to form a heterodimeric protein analog (II). The method is used to produce analogues (agoingts or antagonists) of deglycosylated glycoprotein hormones, potentially useful, e.g. for treating infattility where caused by polycystic ovarian disease (associated with excessive lavels of luteinising hormone). Products that retain DD is are also useful as immunogene or antigens (since a DD may contraining highly antigenic cannon acid sequences). Attachment of a DD (Which may be removed later) facilitates the formation of heterodimers; that have similar structures and allows the combination of subunits that vould other-view companies. On out at all The N'terminal part of a glycoprotein hormone may be modified without loss of activity, and attachment of the DD reduces (formation of humits.
                                                                                  Cysteine knot protein; protein formation; heterodimeric protein analog; deglycostated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 SKEPLAPRCRPINATLAVEKECCPVCITYNTTICAGYCPTHFWLGOVLPALGOVVCHTR 61
1129 SKEPLAPRCRPINATLAVEKECCPVCITYNTTICAGTOPTHTWLGOVLPALGOVVCHTR 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPRRQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82.4%; Score 640; DB 20; Length 273;
86.4%; Pred. No. 2.1e-50;
tive 3; Mismatches 16; Indels 0; Gaps
                                               HCG/hFSH beta subunit-Jun fusion protein sequence.
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AAY43296
ID AAY43296 standard; Protein; 273 AA.
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                                                                                                                                                                                                                                                                                                                                                                                99WO-US08018.
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Best Local Similarity 86.4%,
Matches 121; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-620431/53.
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                                                                                                                                                                                                                 Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                    W09953065-A1.
                                                                                                                                                                                                                                                                                                                                                                             13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                             14-APR-1998;
                                                                                                                                                                                                                                                                                                                                    21-OCT-1999.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence is a fusion protein of hGC/HESH and Jun. The Invention relates to a method of forming a cysteine knot protein (i) having a lipha and relates to a method of forming a cysteine knot protein (ii) having a lipha and beta-subunits compension of the ethics of the white the N-termino of both subunits or the N-terminos of the object of the C-terminus of the beta-subunit and to the C-terminus of the beta-subunit and inmerising the products to form a heterodimeric protein and and [1]. The method is the products to form a heterodimeric protein and and [1]. The method is given by products of the C-terminus of the confidence in the constant of the confidence in the combination of all menuogens or antigens (since a but may be removed later) and the subunity of the formation of heterodimers, that have similar structures and allows the formation of subunits that would otherwise combine of subunits that would otherwise combines and allows the combination of subunits that would otherwise combine to be only or and at all or the subunities. Heterodiment of the Do reduces to formation of homodimers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
               Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match 82.4%; Score 640; 'DB 20; Length 212; Best Local Similarity 86.4%; Pred. No. 1.6e-50; Indels 0; Gaps Matches 121; Conservative 3; Mismatches 16; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 148
AAA1289
ID AAK1289 standard; Protein; 273 AA.
XX AAK13289;
XX XX XX XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 4; Fig 17; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      188 SKAPPPSLPSPSRLPGPSDT 207
                                                                                                                                                                                                                                                                                                          99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                       98US-0059625.
                                                                                                                                                                                                                                                                                                                                                                                                   (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-620431/53.
                                                                                                                                        Homo sapiens.
Synthetic.
                                                                                                                                                                                                           WO9953065-A1.
                                                                                                                                                                                                                                                                                                          13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                       14-APR-1998;
                                                                                                                                                                                                                                                           21-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
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요 ò ò

NAME OF THE PROPERTY OF THE PR

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Analogue 2 (human CG-beta(1-114)-linker-human CG-alpha(1-92)) is especific example of a stople chain goadoctropin having a chorioni gonadoctropin (CG) beta-subunit at the N-terminus and a CG alpha subunit at the C-terminus, joined by a linker of 1-16 anion acida. The analogue has luteinising hormone (lutropin) activity and is useful for inducing ovulation and increasing male fertility.
                                                                                                                                                                                                                      Single chain gonadotropin; human chorionic gonadotropin; hCG; highs; beta; subunit; analogue; glycoprotein hormone; fertility; inhibit; stimulate; increase; lutropin; luteinising hormone; LH; folilicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Methods for altering fortility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating slycoprotein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82.2%; Score 639; DB 16; Length 234; 94.4%; Pred. No. 2.2e-50; Live 0; Mismatches 7; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note- *Arg corresponds to CCG codon*
/labe...|12...|42...|12...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|42...|4
                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
1.20 leader
21.134 Leader
21.134 Loc_beta_subunit_(1-114)
9.70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 13 and Claim 39; F19 7; 102pp; English.
                                                                                                                                                                               Single chain gonadotropin analogue 2.
RESULT 150
AAR86248
ID AAR86248 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95WO-US02067.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-FEB-1994; 94US-0199382.
                                                                                                                                  26-APR-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 82.27
Best Local Similarity 94.4.
Matches 117; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1995-302553/39.
N-PSDB; AAT03219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W09522340-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-AUG-1995.
                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Moyle WR;
                                                                                       AAR86248;
                                                                                                                                                                                                                                                                                                                                                                                       Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This sequence is a fusion protein of HCC/HTSH and Jun. The invention claims to a method of forming a cystelne knot protein (i) having alpha and beta-subunits comprising a ttaching a dimerisation domain (DD) to either the N-terminio of both subunits or the N-terminio of the comprision of the paper of the products to form a heterofularic protein analog (II). The method is alpha-subunit and to the C-terminus of the beta-subunit and dimerising the products to form a heterofularic protein analog (II). The method is used to produce analogues (agonists or antagonists) of degly/cosylated disproportein hormones, potentially useful, e.g. for treating infertility where caused by polycytic ovarian disease (associated with accessive values of lutenising hormone). Products that retain DD's are also useful as immunogens or antigons since a DD may containing Highly antigonic anino acid sequences). Attachment of a DD (which may be removed later) facilitates the formation of a DD (which may be removed later) and latus the compliants that would other-ties combine poorly, or not at all. The N-terminal part of a glycoprotein hormone may be mentioned individual subunits.
                                                                                                                                                    Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62 DVRFESIRLPGCPROWPVVSTAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
189 DVRFESIRLPGCPROWPVVSTAVALCOCALCDSDSTOCTVRGLPSYCSFGEKESSS 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 86.4%; Prod. No. 2.18-50.
Best Local Similarity 86.4%; Prod. No. 2.18-50.
Makeches 121; Conservative 3; Mismatches 16; Indels (
                                                                                                         HCG/HFSH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 6; Fig 19; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SKAPPPSLPSPSRLPGPSDT 268
                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0059625.
                                                                  19-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 273 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                              13-APR-1999;
                                                                                                                                                                                                                                                                       Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                         W09953065-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                    21-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moyle WR;
                     AAY43296;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              249
a
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The invention relates to human single chain forms of the glycoprotein chromone quarter. Which is an agonist or antagonist of lutefablishing hormone (LH), follicle stimulating hormone (FSH), thyroid stimulating hormone (FSH), thyroid stimulating hormone (FSH) or chorionic gonedorropin (CG). All these hormones are heterodimers having identical alpha subunits and differing bets subunits. The agonist forms of single chain hormones are used in treating infertility, as aids in vitro fertilisation techniques, and other therapeutic methods as sociated with the native hormones. The single chain hormones are used in associated with the native hormones. The single chain hormones are used in detect the presence of antibodies with respect to the native proteins in biological samples, as control respect to the native proteins in biological samples, as control respect to the native proteins in biological samples, as control respect to the native proteins in levels of these hormones in various samples, in detecting and purifying
                                                                                                                                                                                                                                                                                                                                                              Region Those "Wild type Asn substituted with Xaa, Where Xaa refers to Gln or other amino acid"
135.142 Those peptide "Linker peptide"
Region 143.234 Corresponds to 1-92 amino acids of human single Misc-difference 194
                                                                                              Human; single chain gonadotropin analog no:2a; anti-infertility; drug; peptide therapy; luteinising hormone; LH; follicle stimulating hormone; FSH; thyrold stimulating hormone; TSH; chorlonic gonadotropin; CG; glycoprotein; infertility; fusion protein; mutant; mutent.
                                                                                                                                                                                                                                                                                                               /note- "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note- "Mild type Asn substituted with Xaa, Where Xaa Nisc-difference 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note- "Wild type Asn substituted with Xaa, Where Xaa refers to Gln or other amino acid"
                                                                                                                                                                                                                               Location/Qualifiers
21..134
/note= "Corresponds to 1.114 amino acids of human
chorionic gonadotropin (CG) beta-subunit"
33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                              Human single chain gonadotropin analog no:2a.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 9; Column -; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   940S-0199382.
940S-0289396.
940S-0310590.
940S-034628.
940S-034628.
970S-0455049.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97US-0918288.
                   04-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-366474/38.
                                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-AUG-1997;
                                                                                                                                                                                          Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US6238890-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-MAY-2001.
                                                                                                                                                                                                                                                 Key
Region
       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequence is an analogue of mature hCG beta subunit having residues 94-97, 102-107, 109, 110, and 112-118 replaced by the corresponding residues in the hFSH protein. It was prepd by the state directed mutagenesis of a DNA sequence encoding the hCG beta subunit. The chimeric hormone is capable of directing hormone binding to both id and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15043, AAR15061-R15125 and AAR15161-R15198).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTHTRVLGGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Momery Match
82.1%; Score 638; DB 12; Length 145;
Bost Local Similarity 86.4%; Pred: No. 1.74-97;
Matches 12; Conservative '3; Migmatches 16; Indels (
                                                                                                                                                                                                                                                   immuno-castration;
man chorionic gonadotropin;
                                                                                                                                                                                                                                            Glycoprotein hormone; fertility; immun immuno-contragestive; vaccine; human c follicle stimulating hormone; FSH; CG;
                                                                                            AAR15073 standard; Protein; 145 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAE04509 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 SKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                                                                                                  07 -MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                    11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Campbell RK, Moyle WR;
                                                                                                                                                                                                         hCG/hFSH chimera, Bl3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-MAY-1990;
141 GSAP 144
                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                 14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                         WO9116922-A.
                                                                                                                                 AAR15073;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAE04509;
                                               RESULT 151
AAR15073
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RESULT 15
AAE04509
ID AAEC
XX
AC AAEC

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qq

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The sequence represents the amino acid sequence of human chorionic conaddructopin (160) beta, amino acids 111. The protein is an important glycoprotein hormone heterodimer, along with luteinising hormone (EM), follicle stimulating barmone (FSM), thyroid stimulating bromene (EM), follicle stimulating barmone (FSM), thyroid stimulating broteins are useful for generating antibodies specifically hormone (TM), which all have identical alpha subunits but differing beta subunits. The proteins are useful for generating antibodies specifically forms of the hormones, in the treatment of infertility, as identified forms of the hormones. The single chain proteins a lid for in vivo fertilisation techniques, and no other therapeutic methods associated with the native hormones. The single chain proteins are further useful as reagents in amenner similar to the heterodimers, as diagnostic tools to detect the presence of antibodies with respect to the native proteins in the bloigical samples, as control reagents in assay kits for assessing the levels of these hormones in various samples, and in detecting and purifying receptors to which the native hormones bid. The single chain forms of the heterodimers are more stable, confolution are reduced since only a single gene to probleme the semiting fine tuning of activity levels and of incente form the single chain forms are unique starting materials for identifying the cumunity permits the protein. One engineered without disturbing the coverall folding of the protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; single chain gonadotropin analog; anti-infertility; drug; peptide therapy; lutenfainsing hormone; IH; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoproten; infertility; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human chorionic gonadotropin beta-subunit fragment (1-114 amino acids).
                       New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 81.58; Score 633; DB 22; Length 114; Bast Local Similarity 100.04; Pred. No. 3.78-56; Indels (Marches 114; Conservative, 0; Mismatches 0; Indels (
                                                                                                              Example 19; Column 34; 86pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAE04492 standard; Protein; 114 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 114 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US6238890-B1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAE04492;
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AAE04492
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creeptors to which the native hormones bind. The single chain hormones are also used in affinity chromatographic preparations of receptors or authormone antibodies. They are used as purification tools for stations of absequent preparations of these materials and to monitor to slading of single chain hormones administered as drugs. The single chain of stropcretains are used to generate antibodies specifically immunoreactive cyclevels of single chain hormones administered as gredifically immunoreactive three new compounds, as substitutes for the heterodimeric forms of hormones. The present sequence is human single chain gonadotroph apprecian consisting of human corions (small provided consisting of human single chain gonadotroph alpha subunit (1-114 anino acids) fused to human single chain gonadotroph alpha subunit (1-32 anino acids) by a linker sequence. This analog serves as a useful stating compound for template directed vaccine design and for the development of hormone-specific vaccines for use in humans.

C Note: The present sequence is not shown in the specification, but is delivered from the human single chain gonadotropin analog not; shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; chorionic gonadotropin; hCG; glycoprotein hormone; infertility; lucenising hormone; HH; follicle stimulating hormone; FSH; thyrold stimulating hormone; TH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 81.6; Score 634; DB 22; Length 234; DB est Local Similarity 93.54; Pred. No. 6.24-60; Metches 16; Conservative 0; Mismatches 8; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human chorionic gonadotropin (hCG) beta, amino acids 1-114.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAU04620 standard; protein; 114 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-091828B.
94US-0199382.
94US-0289396.
94US-031462B.
94US-033462B.
94US-0351591.
95US-0475649.
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                                                                                                                                                                                                                                                                                                                         Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US6242580-B1.
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18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
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AAU04620
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0; Gaps

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This sequence is a fusion protein of hcG/HTSH and Jun. The invention cleicas to a method of forming a cystelie knote protein (1) having alpha cleicas to a method of forming a cystelie knote protein (1) having alpha cleicates to a method of forming a cystelie knote protein (1) having alpha cather the N'terminio of both subunits or the N'terminio of the catherine of the beta-subunit and to the C-terminus of the beta-subunit and dimerialing the products to form a heterodimeric protein analog (11). The method is the products to form a heterodimeric protein analog (11). The method is considered to produce analogicase (asociated with excessive where caused by polycystic ovarian disease (asociated with excessive where caused by polycystic ovarian disease (asociated with excessive lawingements of luteliating hormone). Products that retain DD's are also useful as immunogens or antigens (since a DD may concarning highly antigenic cannon acid asequences). Attachment of a DD (Which may be removed later) facilitates the formation of heterodimers; that have similar structures can allow the formation of subunities that would otherwise combines.

Cand allows the combination of subunities that would otherwise combine condition without loss of activity, and attachment of the DD reduces formation of homodimers. Heterodimers have longer circulation times in vivo than individual subunits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cysteine knot protein; protein formation; heterodimeric protein analog;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81.2%; Score 631; DB 20; Length 212;
85.7%; Pred. No. 1.1e-49;
Live 2; Mismatches 18; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HCG/HTSH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 4; Fig 17; 73pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                98US-0059625.
                                                                                                                                                                                                                                                                                                      99WO-US08018
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Best Local Similarity 85.74
Matches 120; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYNE-) UNIV NEW JERSEY.
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                                            Homo sapiens.
Synthetic.
                                                                                                                                              W09953065-A1.
                                                                                                                                                                                                                                                                                                 13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                           14-APR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to human single chain forms of the glycoprotein charmone quartet which is an agonist or antagonist of intelainising hormone conformed quartet which is an agonist or antagonist of intelainising hormone (TH), follicle stimulating hormone (FSH), thyroid stimulating hormone (TSH), thyroid stimulating hormone (TSH) and the standard hormones are exectedimens having identical alpha subunits and differing beta subunits are hearted infertulity, as olds the form of single chain hormones are used in trenties infertulity, as olds in vitro fertulisation techniques, and other therapeutic methods associated with the native hormones are useful as reagents in a manner similar to heterodimers, as diagnostic tools to confected with the native hormones. The single chain hormones control reagents in assay kits for assessing the lovels of these hormones in various samples, in detecting and puritying coepisors to which the native hormones blud; the single chain hormones are also used in affiliarly chromatographic preparation of receptors or isolation of subsequent preparations of these materials and committee containing and subsequent preparations of these materials and common or isolation of subsequent preparations of these materials and common or subsequence administered as attugs. The single chain of subsequence is human chorionic gonadotropin beta with the present sequence is human chorionic gonadotropin beta combounds. The present sequence is human chorionic gonadotropin beta substitutes for the heterodimeric forms of hormones. The present sequence is human chorionic gonadotropin beta substitute and proteins are used to generate antibodies specifically immunoractive constructing single chain gonadotropin manalogs related to the invention. Analog single chain gonadotropin manalogs related to the invention. Analog custom of subsumment of hormone-specific vaccines for the development of hormone-specific vaccines for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cysteine knot protein; protein formation; heterodimeric protein analog; deglycostylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                          New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
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81.54: Score 633; DB 22; Length 114;
Best Local SImilarity 100.00, Fred. No. 3.76-75;
Matches 114; Conservative 0; Mismatches 0; Indels (
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ANY 1283
ANY 1283
ANY 1283
ANY 1283
ANY 1283;
ANY 1283;
ANY 18-JAN-2000 (first entry)
ANY
ANY 1283;
ANY 19-JAN-2000 (first entry)
ANY
ANY 18-JAN-2000 (first entry)
ANY
ANY ANY 18-JAN-2000 (first entry)
ANY
ANY ANY 18-JAN-2000 (first entry)
ANY
ANY ANY 18-JAN-2000 (first entry)
ANY
ANY ANY 18-JAN-2000 (first entry)
ANY 18-
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94US-0310590.
94US-0334628.
94US-0351591.
95US-0475049.
97US-0853524.
                                                                                                                                                                                                                       (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-366474/38,
                                                                                                                                                                                                                                                                                                      Boime I, Moyle WR;
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22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
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This sequence is a fusion protein of ECC/FTSH and Jun. The invention relates to a method of forming a cystein knot protein (i) having a alpha can beta subunits comprising attaching a dimerisation domain (DD) to ceither the N-terminol of both subunits or the N-terminol of the comprision at the case of the 
                                       Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic overlan disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match
81.2%; Score 631; DB 20; Length 273;
Best Local Similarity 85.7%; Pred. No. 1.4e-49;
Matches 120; Conservative 2; Mismatches 18; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
HCG/HTSH beta subunit-Jun fusion protein sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 6; Fig 19; 73pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   273 AA;
                                                                                                                                                         Homo sapiens.
Synthetic.
                                                                                                                                                                                                                        WO9953065-A1.
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                                                                                                                                                                                                                                                                                                                                                             14-APR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Moyle WR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This sequence is a fusion protein of hcC/HTSH and Jun. The Invention relates to a method of forming a cysteine knot protein (1) having alpha and beta-subunits comprising attaching a dimerisation domain (Db) to either the N-termin of both subunits or the N-terminus of the citizenth of both subunits or the N-terminus of the both subunits or the N-terminus of the claim of the C-terminus of the beta-subunit and dimerising the products to form a herecodimeric protein andlog (II). The method is used to produce analogues (sqonists or antagonists) of deglicosylated glycoprotein hormones, potentially useful. e.g. for treating infertility where caused by polycystic ovarian disease (associated with excessive twents of interhising hormone). Products that retain Db's are also useful as ammongened or antigens (since a Db may containing highly antigenic anino acid sequences). Attachment of a Db (Which may be removed later) and allows the combination of subunities that would otherwise combines and allows the combination of subunities that would otherwise combines. Deportly, or not at all The N-terminal part of a dycoprotein hormone may be conditted without loss of activity, and attachment of the Db reduces by Cormation of homodimers. Heterodimers have longer circulation times in vivo than individual subunits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
deglycosylated glycoprotein hormone: infertility; immunogen; antigen; polycystic ovarian disease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match
81.2%; Score 631; DB 20; Length 273;
Best Local Similarity 85.7%; Pred. No. 1.14-4.9;
Matches 170; Conservative 2; Mismatches 18; Indels 0; daps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 157
ARY43297
XX AAV43297 standard; Protein; 273 AA.
XX AXV43297;
XX
XX
XX XX
XX XX
XX XX
XX XX
XX XX
XX XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 6; Fig 18; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               249 SKAPPPSLPSPSRLPGPSDT 268
                                                                                                                                                                                                                                                                                           98US-0059625.
                                                                                                                                                                                                                                                   99WO-US08018.
                                                                                                                                                                                                                                                                                                                                           (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-620431/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 273 AA;
                                                                                                                                                                                                                                             13-APR-1999;
                                                                                    Homo sapiens.
Synthetic.
                                                                                                                                                      W09953065-A1.
                                                                                                                                                                                                                                                                                           14-APR-1998;
                                                                                                                                                                                                      21-0CT-1999.
                                                                                                                                                                                                                                                                                                                                                                                     Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       đ
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     οy
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80.4%; Score 625; DB 16; Length 234;
92.7%; Pred. No. 4.1e-49;
tive 0; Mismatches 9; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 SKEPLRPRCRPIXATLAVEKEGCPVCITVXTTICAGYCPTWTRVLQGVLRALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The single-chain gonadotropin analogue 2a (human CG-beta(1-114) [N13X, X13X].linker-human CG-alpha[1-25][N13X, N18X]) can be derived from analogue 2 by removing at least one of the four glycosylation sites. The partially deglycosylated analogue has anti-lutedinising hormone (lutropin) activity and can be used for facilitating ownimition, terminating pregnancy and reducing androgen secretion. The effects of analogue 2a depend upon the time it is administered; will minibit fertility when given marry in the menstrual cycle but will inhibit fertility when given later.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 SKEPLRPRCRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                             Misc-difference 33

//note= "wild-type Asn at position 13 of the beta-subunit is pref. replaced by another amino acid (esp. Gln) to remove a glycosylation site*
                                                                                                                                                                  Misc-difference 50
/note= "wild-type Asn at position 30 of the betasubunit is pref. replaced by another amino acid (esp. Gin) to remove a glycosylation site*
                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference 220
/note= "wild-type Asn at position 78 of the alpha-subunit is pref. replaced by another amino acid (esp. Gln) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the artivity and/or levels of circulating slycosprotein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                         Hisc-difference 70
//note - Arg corresponds to CCG codon*
Region //note - Inker
Region //note - 11 Nker
Region // 1.234
21..134
/label- hCG_beta_subunit_(1-114)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 24; Fig 7 and Page 60; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95WO-US02067.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94US-0199382.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 80.41
Best Local Similarity 92.71
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1995-302553/39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W09522340-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-AUG-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moyle WR;
   Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLGGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The sequence is an analogue of mature hCG beta subunit having residues 109 and 110 replaced by methionine and alianine residues respectively, and residues 117.145 deleted. This introduces an additional cleavings site for CMBr. useful for determining the distulphide bonds. This can be used to show that mutagenish has not altered the formal distulphide pattern of analogues, and for see Ammining the sormal states and some seed to show that mutagenish has not altered the formal distulphide pattern of analogues, and for see Ammining the states and some see Amminion that the second seed the second secon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Single chain gonadotropin; human chorionic gonadotropin; hCG; alpha; beta; subunit; nanisoque; dyvoporotesh hormone; fertility; inhibit; stimulate; increase; lutropin; luteinising hormone; LH; follicle stimulating hormone; FSH; vaccine, contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Partially deglycosylated single chain gonadotropin analogue 2a.
                                                                                                                         Glycoprotein hormone; human chorionic gonadotropin; disulphide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New glyco-protein hormone analogues - for inducing fertility of immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81.0%; Score 629; DB 12; Length 116; 98.3%; Pred. No. 8.7e-50; tive 0; Mismatches 2; Indels 0
                                                                        hCG methionine substitution mutant, G4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR86260 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
1..20
/label- leader
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Table VIII; Page 67; 94pp; English.
                                                                                                                                                                                                                                                                                                                                     91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                         90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYNE-) UNIV MED NEW JERSEY.
                        11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 98.3%
Matches 114; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-MAY-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 116 AA;
                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                     07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                     08-MAY-1990;
                                                                                                                                                                                                                                 W09116922-A.
                                                                                                                                                                                                                                                                                 14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR86260;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
Peptide
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/note= "Wild type Val substituted with Thr"
135...142
Anote= "Liker peptide"
143...24
Anote= "Corresponds to 1.92 amino acids of human single chain genadotropin alpha-subunit"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; single chain gonadotropin analog no:2b; anti-infertility; drug; peptide therapy; lutefulsing hormone; LH; follicle stimulating hormone; FSH; thyroid simulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein; mutant; mutein.
       //note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gln or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gln or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "Corresponds to 1-114 amino acids of human chorionic gonadotropin (CG) beta-subunit*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "Wild type Asn substituted with Xaa, refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note- "Wild type Asn substituted with Xaa, refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human single chain gonadotropin analog no:2b.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
21..134
                                                                                                                                                                                                                                                                                                            AAE04519 standard; Protein; 234 AA.
                                                                                                                                             141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94US-0199382.
94US-0289396.
94US-0310590.
94US-031628.
94US-0351591.
95US-0475049.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-0918288.
                                                                                                                                                                                                                                                                                                                                                                                                                     04-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo saplens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US6238890-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-DC-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-MAY-2001.
                                                                                                                                                                                                                                                                                                                                                                  AAE04519;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Region
                                                      g
                                                                                                            οž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to the production of analogues of a heterodimeric subunit gycoportein hormone (DPH) e.g. human chorionic gondouropin conduct gycoportein hormone (DPH) e.g. human chorionic gondouropin conducting the conduction of the conductivity for the corresponding native GPH receptor. This sequence represents a chimaric hosfyfs: beta subunit in which amino acid residues of the modified GPHs. The inspected analogues extending a testa position of the conductivity for the corresponding native GPH receptor. This sequence represents a chimaric hosfyfs: beta subunit in which amino acid residues of the modified GPHs. The inspected analogues are designed specifically to reduce perturbation of the 3-dimensional structure of the hormone, the modified GPHs. The inspected analogues are designed specifically to reduce perturbation of the 3-dimensional structure of the hormone, thereby creating greater likelihood that the dimer will be formed in vivo and the formed dimer will have affinity for the native receptors and have assign static activity on them. The changes stabilise the GPHs and prolong the biological activities of the hormones. The analogues can have uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                              pouq;
                                                                                                                                                                                                                                                                                                                                                                                                                 Analogue; heterodimeric; glycoprotein hormone; hCG; hLH; hFSH; hTSH; human chorionic gonodokropin; human luteinising hormone; disulphide bon human follicle stimulating hormone; human tipyroid stimulating hormone; stability; primer; amplification; PCR; mutation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 80.2%; Score 623; DB 20; Length 165; Best Local Similarity 85.0%; Pred. No. 4.4e-9; Onderson Matches 119; Conservative 3; Mismatches 18; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New stabilised glycoprotein hormones · particularly hCG, hLM, h
or hTSH, have an intersubunit disulphide crosslink between the
alpha- and beta-subunits to improve stability
                                                                                                                                                                                                                                                                                                                                                           Glycoprotein hormone analogue CFC94-117-beta-R6C, Y37C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV. (MCIN-) MCINNIS P G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 17; Page 99; 139pp; English.
                                                                                                                       RESULT 160
AAM99528
ID AAM99528 standard; Protein; 165 AA.
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-US13070.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-JUN-1997; 97US-0050784.
                                                                                                                                                                                                                                                                                                        08-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-081219/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 165 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-JUN-1998;
122 SKAP 125
                                                  141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09858957-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo saplens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-DEC-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Moyle WR;
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WANTED STANFORM OF STANFORM OF

Where Xaa

Where Xaa

(UNIW) UNIV WASHINGTON

δλ g

WPI; 2001-366474/38. Boime I, Moyle WR;

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The sequence is an analogue of mature has beta subunit having residues 99, 113 and 115-712 replaced by the corresponding residues in the human if protein and residues 123-45 deleted. The chimeric hormone may be useful in the treadment of infertility fine chimeric owners and the promotion of fertility in male and female
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 DVRFESIRLPGCPRGVRDVVSYAVALSCQCALCRRSTTSCGGPKDHPLTCDDHR 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New glyco-protein hormone analogues - for inducing fertility as
                                                                                                                                                                                                                                                                                                                                                                                                                                   New glyco-protein hormone analogues - for inducing ferfility a
farmino-castration agents, for suppressibly reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           79.5%; Score 618; DB 12; Length 122; 98.2%; Pred. No. 9.1e-49; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glycoprotein hormone; fertility; immuno-castration:
Immuno-contragestive, vaccine; buman chorionic gonadotropin;
thyroid stimulating hormone; TSH: CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             in men and women and the promotor. --- animals. See AAR15043, AAR15061-R15125 and AAR15161-R15198.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Table VI; Page 65; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90US-0520703.
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                                                                                          91WO-US03162.
                                                                                                                                                         90US-0520703.
                                                                                                                                                                                                                             (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 79.5
Best Local Similarity 98.2
Matches 112; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                 Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hCG/hTSH chimera, C8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                    WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 122 AA;
                                                                                          07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                              08-MAY-1990;
                                                                                                                                                                                                                                                                                                 Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W09116922-A.
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AAR15095

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                                                                                                                                                                                                      The invention relates to human single chain forms of the glycoprotein hormone quartet which is an agenist or antegonist of intelliating hormone component and the control of the control o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                      New DNA or RNA encoding single chain protein useful in treating inferility, as aids in vitro fertilization techniques, or other inferepeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Glycoprotein hormone; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
lutelaising hormone; LH; CG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    79.9%; Score 621; DB 22; Length 234; 91.9%; Pred. No. 9.4e-49; tive 0; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15119 standard; Protein; 122 AA.
                                                                                                                                                         Claim 9; Column -; 87pp; English.
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Best Local Similarity 91.94
Matches 114; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 SKAP 125
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W09116922-A.
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AAR15119
ID AAR1511
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ογ g ò

0; Gaps

δ g

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/note* "wild-type Pro at position 78 of the beta-
subunit can be replaced by another amino acid
to agree with the glycosylation site motif'
                 Single chain gonadotropin analogue 2b with extra glycosylation site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          foote- "wild-type Asn at position 52 of the alphasubunit is pref. replaced by another amino acid (esp. Gln) to remove a glycosylation site."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "wild-type Asn at position 78 of the alphasubunit is pref. replaced by another amino acid (esp. Gin) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Misc-difference 50
/note- "wild-type Asn at position 30 of the beta-subunit is pref. replaced by another amino acid (esp. Gln) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note. "wild-type Asn at position 13 of the beta-
subunit is pref. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Misc-difference 99
/note= "wild-type Val at position 79 of the betasubunit is replaced by Thr to agree with the glycosylation site motif"
                                                                                                                                                                                                                                                                                                                                   Single chain gonadotropin; human chorionic gonadotropin; hCG; plphs; beta; subunit; analogue; glycoprotein hormone; fertility; inhibit; stimulate; increase; lutropin; lutainising hormone; LB; follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                    135...142
/labol- linker
143...34
/label- Gonadotropin_alpha_subunit_(1-92)
193...34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Misc-difference 70 fote- "Arg corresponds to CCG codon" Misc-difference 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1...10
7.1abel - leader
21...134
7.label - hCG_beta_subunit_(1-114)
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                                                                                                                                                                                                    AAR86270 standard; Protein; 234
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Misc-difference
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                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                        AAR86270;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key
Peptide
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                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                    The sequence is an analogue of mature hCG beta subunit having residues 112-145 deleted. It was prepd. using PCR mutagenesis to linear a stop codon into the gene. It may be useful as an agonist for supression of gonadal activity during chemotherapy.

See AARISOGI-RIS125 and AARISIGS-RIS198
                                                                                The sequence is an analogue of mature hCG beta subunit having residues 112, 113, and 115-114 replaced by the corresponding residues in the hTSH protein and residues 125-145 deleted. The chimeric hormone may be useful as a TSH antagonist for the treatment of hyperthyroidism. See ANRISO43, ARRISO61-RISI2S and AARISI61-RIS198.
                                                                                                                                                                                                                                                                                                                                                                   62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
                                                                                                                                                                                                                                                                                                                                                                                       61 DVRFESIRLPGCPRGVNPVVSYAVALSCCCALCRRSTTDCGGPKDHPLTCDTKR 114
                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels 0;
immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New qlyco-protein hormone analogues - for inducing fertility of immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                      Query Match 79.55; Score 618; DB 12; Length 124; Best Local Similarity 98.24; Pred. No. 9.3e-9; Marches 112; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 79.3%; Score 615; DB 12; Length 111; Best Local Similarity 100.0%; Fred. No. 1.5e-88; Metches 111; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glycoprotein hormone; immuno-castration; immuno-contragestive; vaccine; human chorionic gonadotropin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 164
AAR15161
ID AAR15161 standard; Protein; 111 AA.
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Table VII; Page 66; 94pp; English.
                                                   Table III; Page 62; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAY-1990; 90US-0520703.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hCG deletion mutant, Fl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1991-353528/48.
                                                                                                                                                                                                    Sequence 124 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 111 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-NOV-1991.
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Gaps

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The sequence is an analogue of mature hFSH beta subunit having several residues replaced by the corresponding residues in the hCG protein. The chimert hormone is capable of directing hormone blinding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15041, AAR15061-R13193 and AAR15161-R13193)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequence is an analogue of mature hCG beta subunit having residues 105-107, 100, 113, 115-117, and 119-122 replaced by the residues 105-107, 100, 113, 115-117, and 119-122 replaced by the responding residues in the bowine LH protein and residues 123-145 deleted. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunosen, agoinst and/or antagonist. See AARISO41, ARKISO61-R15128 and AARIS561-R15189.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
  New glyco-protein hormone analogues - for inducing fertility a immuno-castration agants, for suppressing reproductive system development and as immuno-contragestive waccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 DVRFESIRLPGCPRGVNPVVSTAVALSCOCALCRRSTTDCGGPKDHPLTCD 112
                                                                                                                                                                                                                                                                                                                                                         Ouery Match 77.2; Score 600; DB 12; Length 115; Best Local SImilarity 98.2t. Pred. No. 3.7e-47; Maches Hatches 19; Conservative 1; Mismatches 1; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLSYD 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glycoprotein hormone; immuno-castration;
Immuno-contragestive; vaccine; human chorionic gonadotropin;
luteinising hormone; LH; OG; bovine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR15108 standard; Protein; 122 AA.
                                                                                          Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Table IV; Page 63; 94pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hCG/bLH chimera, D12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                   Sequence 115 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-MAY-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Gaps
                                                                                                                                                                                                                                                                                                       The single-chain gonadotropin analogue 2b (human CG-beta(1-114) (N13X,N30X,P3X,N78Y) Linker-human CG-alpha(1-92)[N3X,N8X)] is an example of a chimeric glycopeptide hormone having an extra glycosylation site. Addition of oligosaccharides has a positive effect on stability of hormones in circulation and can be used to pervent unvanted antibody or receptor interactions. The present analogue has anti-intelnishing hormone (lutropin) activity and can be used for facilitating ovulation, terminating pregnancy and reducing androgen secretion.
                                                                                                                                                                                                    of
                                                                                                                                                                      Methods for altering fertility in mammals, esp. humans · e.g. stimulating fertility by reducing the activity and/or levels circulating slyco-protein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 78.8%; Score 612; DB 16; Length 234; Best Local Similarity 91.1%; Pred: No. 6.2e-48; Matches 113; Conservative 0; Mismatches 11; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; voctine; hunga chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                              Example 25; Fig 7 and Page 60; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR15087 standard; Protein; 115 AA.
18-FEB-1994; 94US-0199382.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hCG/hFSH chimera, B27.
                                                                                                                             WPI; 1995-302553/39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1991-353528/48.
                                         (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-NOV-1991.
                                                                                    Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR15087;
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AAR15087
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The sequence is an analogue of mature hCG beta subunit comprising residues 1:115 of hCG beta having residues 102-104, and 112-115 replaced by the corresponding residues in the hESH protein. The changer is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR15041, AAR15061-R15125 and AAR15161-R15198).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 75.4%; Score 586; DB 12; Length 115; Best Local SImilarity 96.4%; Pred. No. 6.9e-46; Marches 107; Conservative 1; Mismatches 3; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
            New glyco-protein hormone analogues - for inducing fertility as immuno-castration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Glycoprotein hormone; fertility; Immuno-castration;
Immuno-contragestive: vaccine; human chorionic gonadotropin;
follicie stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAU04609 standard; Protein; 234 AA.
                                                                                                           AAR15081 standard; Protein; 115 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Table II; Page 61; 94pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                  (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                        90US-0520703.
                                                                                                                                                                                                                                                                                                                                                            91WO-US03162
                                                                                                                                                                 11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                              Campbell RK, Moyle WR;
                                                                                                                                                                                             hcG/hFSH chimera, B21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 115 AA;
                                                                                                                                                                                                                                                                                                                                                            07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                      08-MAY-1990;
                                                                                                                                                                                                                                                                            Homo saptens.
                                                                                                                                                                                                                                                                                                                                  14-NOV-1991.
                                                                                                                                                                                                                                                                                                        WO9116922-A.
                                                                                                                                       AAR15081;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAU04609;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 170
AAU04609
ID AAU0460
XX
AC AAU0460
XXX
DT 23-OCT-
XX
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                                                                                                                                                  The sequence is an analogue of mature hCC beta subunit having residuas 77, 82, 81, 89, 93, 99, 113 and 115-122 replaced by the Corresponding residues in the human LH protein and residues 123-145 deleted. The chimeric hormone may be useful in the treatment of infertility in men and women and the promotion of fertility in male and female animals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6; Indels 9; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5; Indels 0; Gaps
                                                                                            2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTHTRVLQGVLPALPQVVCNYR 61
                                      Queiy Match 76.1%; Score 591.5; DB 12; Length 122; Best Local Similarity 86:7%; Pered. No. 2.3e-46; Marches 112; Conservative 1; Mismatches 6; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New glyco-protein hormone analogues - for inducing fertility .
Immuno-castration agents, for suppressing reproductive system
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                Glycoprotein hormone; immuno-castration;
Immuno-contragestive, vaccine; human chorionic gonadotropin;
luteinising hormone; LH; GG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 75.81; Score 589; DB 12; Length 122; Best Local Stallarity 93.08; Pred. No. 3.99-66; Metches 106; Conservative 3; Mismatches 5; Indels Metches 106; Conservative 3; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    See AAR15043, AAR15061-R15125 and AAR15161-R15198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Table VI; Page 65; 94pp; English. .
                                                                                                                                                                                                                                                                          RESULT 168
AAR15123
ID AAR15123 standard; Protein; 122 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-MAY-1991; 91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYNE-) UNIV MED NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                        11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                      hCG/hLH chimera, A8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 122 AA;
            Sequence 122 AA;
                                                                                                                                                                                                        122 SKAPPPSL 129
                                                                                                                                                                                                                                115 --- PLPSI 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-NOV-1991.
                                                                                                                                                                                                                                                                                                                              AAR15123;
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Single chain gonadotropin analogue #8.

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The invention relates to human single chain forms of the glycoprotein moreone quarter which is an agonist or antagonist of lutenhising hormone (LB), folicle stimulating hormone (FSH), thyroid stimulating hormone (TSH) or chorionic gonadotropin (CG). All these hormones are heterodimers having identical alpha subunits and differing beta subunits: The agonist forms of single chain hormones are used in treating infertility, as aids in vitro fertilisation techniques, and other therapeutic methods associated with the native hormones. The single chain hormones are useful as reagents in a manner similar to heterodimers, as diagnostic tools to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "Linker peptide"
145.-234
/note= "Corresponds to 1-92 amino acids of human single
chain gonadotropin alpha-subunit"
                                                                                                                                                                                                                                                                                                                                                                                                              Human; single chain gonadotropin analog no:8; anti-infertility; drug; peptide therapy; luterialising hormone; H; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note- "Corresponds to 95-103 amino acids of human
folilcle stimulating hormone (FSH) beta-subunit"
131..134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note-"Corresponds to 1-100 amino acids of human chorlonic gonadotropin (CG) beta-subunit*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                       Human single chain gonadotropin analog no:8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "DDPR peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
21..120
                                                                                                                                                                       AAE04481 standard; Protein; 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 9; Fig 12; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94US-0199382.
94US-0289396.
94US-0310590.
94US-0334628.
94US-0351591.
95US-0475049.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97US-0918288.
                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note- *D
135..142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-366474/38.
N-PSDB; AAD08799.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Boime I, Moylé WR;
||
|141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US6238890-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-AUG-1997;
                                                                                                                                                                                                                                                                                               04-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-MAY-2001.
                                                                                                                                                                                                                                       AAE04481;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
Region
                                                                                                       RESULT 171

The Mod 48 11

The Mod 48 12

X AREO 44 81

XX AREO 44 81

XX Human;

XX Hum
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequence represents the amino acid sequence of single chain gondeductorpin manalogue 16. The givectorete hormone analogue 18. The givectorete hormone according antibodies specifically immunoractive with new compounds, as a substitute for the heterodimeric forms of the hormones, in the treatment of infertility, as an aid for in vivo fertilisation techniques, and in other therapeutic methods associated with the native hormone. The single chain protein is further useful as a reagent in a monner similar to the heterodimer, as a disquostic tool to detect the componer similar to the heterodimer, as a disquostic tool to detect the hormone and the presence of antibodies with respect to the native proteins in the lowel of another so of the samples, as a control reagent in assay futs for assessing the preligious of the heterodimers of homodimers have the following advantages over their dimeric forms: they are more stable, problems of recombinant production are reduced since only a single end is needed to transcribe, translate and process, provide an alternate form thus permitting fine tuning of activity levels and of in vivo half lives. Single chain forms care unique starting materials for identifying truncated forms with the care unique starting materials for identifying truncated forms with the cutivity of the dimer. The linkagh between the subunits permits the protein to be engineered without disturbing the overall folding of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                               Human; glycoprotein hormone; infertility; in vivo fertilisation; single chain gonadotropin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 74.99; Score 522; DB 22; Length 234; Best Local Similarity 88.74; Pred. No. 3.3e-62; Matches 110; Conservative 0; Mismatches 14; Indels Matches 100; Conservative 0; Mismatches 14; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 12; Fig 12; 86pp; English.
                                                                                                                                                                                                                                                                                                                                                                      970S-0918288.
940S-0199382.
940S-0289396.
940S-0314628.
940S-0334628.
950S-0475049.
                                                                                                                                                                                                                                                                                                                           99US-0282357.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-424301/45.
N-PSDB; AAS08499.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 234 AA;
                                                                                                                                       Homo sapiens.
                                                                                                                                                                                               US6242580-B1.
                                                                                                                                                                                                                                                                                                                       31-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                          25-AUG-1997;
18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-DEC-1994;
07-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122 SKAP 125
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0; Gaps

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The sequence is an analogue of mature hCG beta subunit comprising residues 11:15 of hCG beta having residues 105-107, 109, 110 and 17-115 replaced by the corresponding residues in the hFSH protein. The chimeric hormone is capable of directing hormone binding to both LH and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (see AARISO41, AARISO61-RIS125 and AARIS161-RIS198).
                                                                                                                                                                                                                                                                                                       Single chain gonadotropin; human chorionic gonadotropin; hCG;
piphs; beta; subunit; analogue; glycoprotein hormone; fertility;
inhibit; stimulate; increase; lutropin; luteinising hormone; LH;
follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 73.74; Score 573; DB 12; Length 115; Best Local Similarity 95.51; Pred. No. 12-44; Best Local Similarity 95.51; Pred. No. 12-44; Indels (Matches 16; Conservative 1; Mismatches 4; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.20
/label= leader
21.120
/label= hCG_beta_subunit_(1-100)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Single chain gonadotropin analogue 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 173
AAR86254
ID AAR86254 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94US-0199382.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-APR-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1995-302553/39.
N-PSDB; AAT03233.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (SENS-) SENSI-TEST.
                                                                                                                                                                                           115 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W09522340-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-AUG-1995.
                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR86254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Key
Peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cc detect the presence of antibodies with respect to the native proteins in biological samples, as control resquest in assay kits for assessing the certal of these hormones in various samples, in detecting and purifying receptors to which the native hormones bind. The single chain hormones cc antibormone antibodies. They are used as purification tools for single-chain hormones antibodies. They are used os preparation of subsequent preparations of these materials and to monitor contains of single chain hormones administered as drugs. The single chain of yupoproteins are used to generate antibodies specifically immunorsactive dith these new compounds, as substitutes for the heterodiancic forms of consisting ones. They are used to generate antibodies specifically immunorsactive druch man of properties are used to generate antibodies specifically immunorsactive druch and properties of the invention. Analog no.8 is a fission protein consisting one related to the invention, hadlog no.8 is a fission protein cataly follow the consisting or cataly bromone (FSB) becare subunit (1-100 amino acids) by a linker sequence. This analog serves as a cuttal tarting compound for template directed vaccine design and for the development of hormone-specific vaccines for use in humans.

Squence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCTVRGLGPSYCDDPRGSGSGS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 SKEPLRPRCRINATLAVEREGCPVCITVNTTICAGTCPTMTRVLQGVLPALPQVVCNTR 61
11 SKELRPRCRPTNATLAVEREGCPVCITVNTTICAGTCPTMTRVLQGVLPALPQVVCNTR 81
21 SKEPLRPRCRPTNATLAVERGCPVCITVNTTICAGTCPTMTRVLQGVLPALPQVVCNTR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New glyco-protein hormone analogues - for inducing fertility as immuno-easteration agents, for suppressing reproductive system development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 74.94; Score 592; DB 22; Length 234; Best Local Similarity 88.74; Pred. No. 3.34-45; Marches 110; Conservative 0; Mismatches 14; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glycoprotein hormone; fertility; immuno-castration;
immuno-contragestive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 172
AAR15083
ID AAR15083 standard; Protein; 115 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90US-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hCG/hFSH chimera, B23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-NOV-1991.
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The sequence is that of a modified form of human chorionic gonadotrophin (MCG), amalogue "O', in which amino acids in the "D' and/or "G' regions have been subtituted resulting in changes in the binding specificity and avidity of luteinising hormone (HA) and follicle stimulating hormone (HA) and follicle stimulating beta-heterodiameric polypeptide having an affinity to vertebrate LH and FSH receptors. Such an analogue can be prepared having a desired ratio of FSH:LH activity. The polypeptide may be used for treating human infertility or polycystic ovarian disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New alpha, beta-hetero:dimeric polypeptide derivs. - which bind to thefinishing and follicle stimulating hormone receptors, useful for controlling the ratio of FSH to LH activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HCG; human; chorionic gonadorropin; beta-subunit; heterodimer; alpha-subunit; in receptor; FST receptor; HLF IST, thyrotropin; Driegion; Gregion; protein engineering; fertility; hormone folicle stimulating hormone; luteinising hormone; TSH; evulation; spermatogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

73.21; Score 569; DB 14; Length 114;
Best Local Similarity 93.64; Pred. No. 2.4e-44;
Matches 103; Conservative 1; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note 'FSH D-region'
98..07
/note-'HCG G-region fragment'
108..109
/note-'FSH G-region fragment'
110..114
/note-'FSH sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualiflers
1..93
/note= "HCG sequence"
94..97
                                                                                                                                                Disclosure; Page 21; 98pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR88922 standard; protein; 114 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94US-0184408.
91US-0717151.
93US-0108845.
95US-0425673.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91US-0717151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-JUL-1996 (first entry)
WPI; 1993-018070/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 114 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-JAN-1994;
18-JUN-1991;
18-AUG-1993;
18-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USS508261-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR88922:
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Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 175
AAR88922
ID AAR8892
XX
AC AAR8892
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                                                                                                                                                              Analogue 8 (hCG-beta(1-100)-hFSH-beta(95-103)-DDBR-linker-human alpha(1-29) is a specific example of a single chain gonadortropin having a chorionic gonadortropin (CG) beta-subunit at the N-terminus and a CG alpha-subunit at the C-terminus, joined by a linker of 1-16 amino acids. The analogue has follicle stimulating hormone (follitropin) and luteinising hormone (lutropin) and luteinising hormone (lutropin) acidity but is structurally mare similar to hoc then to hFSH. The analogue is useful for inducing follicle development and increasing male fertility.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDGGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ## I DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCTVRGLGPSYCDDPRGSGS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hGG; qiycoprotein hormone analoque; human infertility; LH; FSH;
luteinising hormone receptor; follicle stimulating hormone receptor;
vertebrate; polygystic ovarian disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94.97
/note- non-hcd derived residues*
108.114
/note- non-hcd derived residues*
94.97
/note- To region - LH binding and specificity*
/note- G region - FSH binding and specificity*
                    Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the arterity and/or levels of circulating slycosprotein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match 73.7%; Score 573; DB 16; Length 234; Best Local Similarity 87.9%; Pred. No. 2.1e-44; Marches 109; Conservative 0; Mismatches 15; Indels (
                                                                                                                  Example 19 and Claim 39; Fig 13; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Modified hCG beta-subunit - analogue "Q".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR31005 standard; protein; 114 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141 GSAP 144
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Campbell RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-JUN-1992;
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AAR310
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The invention relates to human single chain forms of the glycoprotein channed quarter which is an agonist or antagonist of lutefinising hormone (CHJ), follicle stimulating hormone (FSH), thyroid stimulating hormone (CHJ), follicle stimulating hormone (FSH), thyroid stimulating hormone (CHJ), follicle stimulating hormones are became to the control of the control of subsets hormones are bettercodimers. CC having identical alpha subunits and differing beta subunits. The agonist formones are used in treating infertility, as alds to associated with the native hormones. The single chain hormones are useful case as reagents in a manner similar to heteroidmers, as diagnostic methods as reagents in a manner similar to heteroidmers, as diagnostic tools to detect the pressure of antibodies with respect to the native process in bodicial samples, as control reagents in assay kits for assessing the levels of these hormones in various samples, in detecting and purifying receptors to which the native hormones bind the single chain normones. The single chain normones are also used in affinity chromatographic preparation of receptors or antibodies. They are used as purification tools for antibodies are used to generate antibodies specifically immunoreactive (consisting of human chorionic gnadeforcoin (GC) beca subunit (1907 and and analog no Barelated to the Invention. Analog no: Baris a fusion protein consisting of human chorionic gnadeforcoin (GC) beca subunit (1912 amino acids) by a linker sequence. This analog serves as a useful starting compound for template directed reach paraner specific vaccines for use in humans.

C development of hormone specific vaccines for use in humans.

C development of hormone specific vaccines for use in humans.

C development of hormone specific vaccines for use as pecification, but is development with the precipilation and the human single to the propertion of the precipilation of the preci
                                         131.134 (Anote "DDR peptide" 135..142 (Anote "Linker peptide" 143..24 (Anote "Corresponds to 1-92 amino acids of human single chain gonadotropin alpha-subunit" 1914
                                                                                                                                                                                                                                                                                                                                                                     Misc-difference 130 co. "Wild type Asn substituted with Xaa, Where Xaa Misc-difference 230 co." Here Aman on the Aman Conce-" Wild type Asn substituted with Xaa, Where Xaa refers to Glo or other amino acid".
// note= "Corresponds to 95-103 amino acids of human follicle stimulating hormone (FSH) beta-subunit* 131...134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 9; Column -; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94US-0199382.
94US-0289396.
94US-0310590.
94US-0351591.
95US-0475049.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US6238890-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-AUG-1997;
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                                                                                                         Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The sequence is an example of a glycoprotein hormone beta-chain

that analogue used to construct an alpha, beta wheterodimer polypeptide

with altered binding affinity to LH receptor and FSH receptor. The

theterodimer preferably contains an HGC alpha-submult and a chimaeric

beta-subunit containing HGC, LH, FSH and/or thyrotropin residues.

Eliding activity and specificity may be altered without disrupting

therecodimer formation or reaction with antibodies. The Dresgion of

HGC is most important for FSH subunit and the Gregion of

EGC is most important for FSH binding, and the Gregion of

and G oritical residues of the Gregion, binds to both FSH receptor

c and LH receptor. A cDM for analogue-Q may be expressed in a

C COS-7 cell culture. This type of hormone analogue may be useful

C clinically for induction of ovulation in women with polycystic ovary

some circulating allowed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; single chain gonadotropin anglog no:8a; anti-infertility; drug; peptide therapy; lutefailsing hormone; Lif follicle stimulating hormone; PSB; thyroid stimulating hormone; TSB; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein; mutant; mutein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    // note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gln or other amino acid"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 SKEPLRPRCRPINATLAVEKEGCPVCIIVNITICAGYCPTMTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                     New alpha, beta-hetero:dimeric glyco:protein hormone polypeptide(s) - having a non sturally occurring beta-subunit derived from hGG, LEH, FSH and TSH at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualiflers
21...10
70...10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTC 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 DVRFESIRLPGCPRGVNPVVSTAVALSCQCALCDSDSTDCGGRKDHPSYC 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          33
/note= "Wild type Asn substituted with Xaa,
refers to Gln or other amino acid"
                                                                                                                                Campbell RK, Han Y, Macdonald GJ, Moyle WR, Wang Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human single chain gonadotropin analog no:8a.
                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Column 11-12; 27pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 176
AAE04515
ID AAE04515 standard, Protein; 234 AA.
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 st Local Similarity 93.6
tches 103; Conservative
                                                                (UYNE-) UNIV NEW JERSEY
                                                                                                                                                                                                    WPI; 1996-208744/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 114 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo saplens
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S:
Matches 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAE04515;
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Region
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                                                                                                               Gaps
                                                                                                                                                         2 SKEPLRPRCRPINATLAVEKEGCPYCITVNTTICACTCPRTRILGOVLPALPOVYCHTR 61
1 SKEPLRPRCRPINATLAVEKEGCPYCITVNTTICACTCPRTRVAGOVLPALPOVYCHTR 60
1 SKEPLRPRCRPINATLAVEKEGCPYCITVNTTICACTCPRTRVAGOVLPALPOVYCHTR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The sequence is an example of a glycoprotein hormone beta-chain analpha, peta heta-chain analpha, peta-hetaconier polypeptide with altered binding affinity to LH receptor and FSH receptor. The heterodimer preferably contains an RG alpha subunit and a chimmeric beta-subunit containing HG, HH, FSH and/Or thyrotropin residues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New alpha, beta-hetero:dimeric glyco:protein hormone polypeptide(s)
- having a non-naturally occurring beta-subunit derived from hCG,
LH, FSH and TSH
                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              H(GC; human; chorionic gonadetrophin, bet-subunit; heterodiner; alpha-subunit; lH receptor; FSH receptor; LH; FSH; thyrotropin; presqion; orregion; protein engineering; fertility; hormone; tolicle stimmlating hormone; lucefinising hormone; 75H; evulation; spermatogenesis.
                                                    Ouery Watch 72.2%; Score 561; DB 14; Length 114; Best Local Similarity 92.18; Pred. No. 1.18-43; Metches 105; Conservative 0; Mismatches 9; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Campbell RK, Han Y, Macdonald GJ, Moyle WR, Wang Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Column 11-12; 27pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR88920 standard; protein; 114 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94US-0184408.
91US-0717151.
93US-0108845.
95US-0425673.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HCG analogue-G beta-subunit.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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          Sequence 114 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JAN-1994;
18-JUN-1991;
18-AUG-1993;
18-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US5508261-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-APR-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR88920;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
Region
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                                                                                                                                                                                                                                                                                                                                                                                               MAR89920 MAR89920 MAR89920 MAR89920 MAR89920 MAR89920 MAR89920 MAR99920 MAR99920 MAR99920 MAR99920 MAR99920 MAR99920 MAR99920 MAR9920 
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                                                                                                                                                                                                                                                       0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hGG; glycoprotein hormone analogue; human infertility; LH; FSH;
luteinising hormone receptor; follicle stimulating hormone receptor;
vertebrate; polycystic ovarian disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New alpha, beta-hetero-dimeric polypeptide derivs. - which bind to tribefulsing and follicle stamitating hormone receptors, useful for controlling the ratio of FSH to LH activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
101..109
//note= "D region - LH binding and specificity"
100..106
//note= "G region - FSH binding and specificity"
                                                    73.1%; Score 568; DB 22; Length 234; 87.1%; Pred. No. 6.1e-44;
Live 0; Mismatches 16; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified hCG beta-subunit - analogue "G".
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR31003 standard; protein; 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             910S-0717151.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-MAY-1993 (first entry)
                                                    Query Match 73.1
Best Local Similarity 87.1
Matches 108; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYNE-) UNIV NEW JERSEY.
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Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                       122 SKAP 125
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                                                                                                                                                                                                                                                                                                                                                                                                                        141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09222568-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-DEC-1992.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR31003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
Region
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The single-chain gonadotropin analogue [8a (hCC-beta(1-100)[NI3X,N30X]-hFSH-beta(55-103)-DDPR-linker-chaman CC-alpha(1-2)N(NSX,NSX)] can be derived from analogue 8 by removing at least one of the glycosylation sites. The partially deglycosylated analogue has antifolicle stimulating hormone (follicle and and and an analogue has not hormone (altrophin) activity and is useful for treating ovarian hyperstimulation and reducing spermatogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                //note- "wild-type Asn at position 78 of the alphasubunit is pref. replaced by another amino acid (esp. Gin) to remove a glycosylation site*
         "wild-type Asn at position 52 of the alphasubult is pref. replaced by another amino acid (esp. Gln) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Single chain gonadotropin; human chorionic gonadotropin; hCG;
pipha; beta; subunit; analogue; glycoprotein hormone; fertility;
inhibit; stimulate; increase; lutropin; luteinising hormone; LH;
follicle stimulating hormone, FSH; vaccine, contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating glyco:protein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71.9%; Score 559; DB 16; Length 234; 86.3%; Pred. No. 4e-43; tive 0; Mismatches 17; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 24; Fig 13 and Page 60; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Single chain gonadotropin analogue 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR86249 standard; Protein; 234
                                                                                                                                                                                                                                                                                                                                                                        94US-0199382.
                                                                                                                                                                                                                                                                                                                              95WO-0S02067
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 71.99
Best Local Similarity 86.33
Matches 107; Conservative
            /note-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1995-302553/39.
                                                                                             Misc-difference 220
                                                                                                                                                                                                                                                                                                                                                                                                                         (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 SKAP 125
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                                                                                                                                                                                                                                                                                                                              17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                        18-FEB-1994;
                                                                                                                                                                                                                                                                                   24 - AUG-1995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR86249;
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Binding activity and specificity may be altered without disrupting heterodian formation or reaction with antibodies. The D-region of fact is most important for th receptor binding, and the G-region is most important for th receptor binding, and the G-region is most important for FSH binding. Analogue-G, with an HGC b-region and and FSH G-region, has high affinity to both LH and FSH receptors. A CNR NG or analogue-GT (ARR8924) is disperted with Bgills and SSH and lighted with oil purcleoted ANT12942, followed by expression in Escherichla coll INFS appla and a COS7 cell culture. An analogue with a low zatio of LHFFSH activity should be useful culturally for induction of ovulation in women with polycystic overy disease, or to increase spermatogenesis in azospermic males
                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 SKEPLRPRCRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "wild-type Asn at position 13 of the beta-
subunit is pref. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               % foote- "wild-type Asn at position 30 of the beta-
subunit is pref. replaced by another amino
acid (esp. Gln) to remove a glycosylation
site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /oce 70 / note - Arg corresponds to CCG codon* 121..129 / 121..129 / 121..129 / 121..129 / 121..139 / 120..129 / 120..129 / 121..134 / 120..134 / 120..134 / 120..134 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136 / 120..136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Single chain gonadotropin; human chorionic gonadotropin; hCG;
pipha; beta; subunit; analoque; gytopprotedin hormone; fertility;
inhibit; stimulate; increase; lutropin; luteinising hormone; LH;
follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRSTTDCTVRGLGPSYCDDPR 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
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                                                                                                                                                                                                                                                                                                                                                Ouery Match 72.2%; Score 561; DB 17; Length 114; Best Local Stallarity 92.1%; Pred. No. 1.18-4.3 Matches 185; Conservative 0; Manches 9; Indels (
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1.20 leader
21..120
1.30 Locates
21..120
7.abel- hcG_beta_subunit_(1-100)
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                                                                                                                                                                                                                                                                                                     Sequence 114 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR86266;
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Peptide
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New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds. In treating infertility, or as aids for in vivo fertilization techniques
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21 SREPLRPWCHPINAILAVEKEGCPVCITVWTTICAGYCPTWARVLQAVLPPLQVVCTYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLOGVLPALPQVVCNTR 61
                                                                                                                                                                                                                                                                                    Example 7; Fig 7; 86pp; English.
                                                                   97US-0918288.
94US-0199382.
94US-0289396.
94US-0334628.
94US-0351591.
95US-0475049.
                                                   99US-0282357
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N-PSDB; AAS08489.
                                                                                                                                                                                  Boime I, Moyle WR;
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                                                                     25-AUG-1997;
18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-UN-1995;
09-MAY-1997;
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                                                  31-MAR-1999;
                               05-JUN-2001
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AAE04476
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                                                                                                                                                                                                                                                                                                                       Analogue 3 (human LH-beta(1-114)-linker-human-alpha(1-92)) is a specific example of a single chain gondotroph; chimeric proteins having a cholronic gonadotropin (GC) beta subunit at the N-terminus and a CC alpha-subunit at the C-terminus, joined by a linker of 1-16 (autho edids are claimed. The analogue has luteinising hormone (lutrophn) activity and is useful for inducing ovulation and increasing male fertility.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 71.94; Score 559; DB 16; Length 234; Best Local Similarity 81.54; Pred. No. 44-41; Matches 101; Conservative 6; Hismatches 101; Conservative 6; Hismatches 103; Conservative 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; glycoprotein hormone; infertility; in vivo fertilisation;
single chain gonadotropin.
                                                                                                                                                                                                                                                             Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the artility and/or levels of elroulating slyco-protein formones having lurropin activity
        Location/Qualifiers
1.20
1.20
1.31
2.134
1.35-1-134
1.35-1-1
1.35.142
1.35.142
1.35.142
1.35.142
1.35-1-1 linker
1.43...334
/label= Gonadotropin_alpha_subunit_(1-92)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Single chain gonadotropin analogue #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAU04604 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                    Example 14; Fig 8; 102pp; English.
                                                                                                                                                     95WO-US02067.
                                                                                                                                                                      18-FEB-1994; 94US-0199382.
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N-PSDB; AAT03221.
                                                                                                                                                                                           (SENS-) SENSI-TEST.
                                                                                                                                                   17-FEB-1995;
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                                                                                                            W09522340-A1.
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                                                                                                                                                                                                               Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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analog no:3 related to the invention. Analog no:3 is a fusion protein consisting of human lutelinishing hormone (EH) beta-subunit (1-114 maino acids) fused to human single chain gonadotropin alpha-subunit (1-92 maino acids) by a linker sequence. This analog serves as a useful starting compound for template directed vaccine design and for the development of hormone specific vaccines for use in humans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNTR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sequence is an analogue of mature hCG beta subunit having several residues replaced by the corresponding residues in the boyone LH protein and having residues 123-145 deleted. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, agonist and/or antagonist.
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immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                     Omery Match 71.9%; Score 559; DB 22; Length 234; Best Local Similarity 91.5%; Pred. No. 4e-43; Marches 101; Conservative 6; Mismatches 17; Indels C Matches 101; Conservative 6; Mismatches 17; Indels C
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Immuno-contragestive; vaccine; human chorionic gonadotropin;
luceinising hormone; LH; GG; bovine.
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AR15107
X
X
X
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C
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C
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AR161
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                                                                                                                                                                                                                                                                                                                    234 AA;
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                                                                                                                                                                                                                                                                                                                    Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /octor *Corresponds to 1-114 amino acids of human litteinising hormone (LH) beta-subunit*
115:14
/force**
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                                                                                                                                                                                                                                                                                                                                           Human; single chain gonadotropin analog no:3; anti-infertility; drug; peptide therapy; luteinising hormone; IH; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein.
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                                                                                                                                                                                                                                                                     Human single chain gonadotropin analog no:3.
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AAE04476 standard; Protein; 234
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94US-0289396.
94US-0310590.
94US-034628.
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N-PSDB; AAD08789.
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12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
Synthetic.
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                                                                                       AAE04476;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note- "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Glo or other amino acid"
                                                                                                                                   Gaps
                                                                                                                                                                            /note= "Wild type Asn substituted with Xaa, Where Xaa refers to Gln or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      //note= "Wild type Asn substituted with Xma, Where Xma refers to Gin or other amino acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Where Xaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
21..120
/note= "Corresponds to 1-100 amino acids of human chorionic gonadotropin (CG) beta-subunit"
                                                                                                                                                                                                                                                                 62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
                                                                                                                                                                                                                                                                                           ö
                                                                                    Length 181;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note- "Wild type Asn substituted with Xaa, refers to Gln or other amino acid" 220
                                                                                    Query Match 71.4%; Score 555; DB 70; Length 18 Best Local Similarity 86.6%; Pred. No. 7.1e-41; Matches 99; Conservative 6; Mismatches 9; Indels Matches 99; Conservative 6; Mismatches 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human single chain gonadotropin analog no:8b.
                                                                                                                                                                                                                                                                                                                                                                                                                   AAE04525 standard; Protein; 234 AA.
  vivo than individual subunits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97US-0918288.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rel
Misc-difference 98
                                              Sequence 181 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo saplens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US6238890-B1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAE04525;
                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
Region
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                                                                                                                                                                                                                                                                                                                                                                          RESULT 185
AAE04525
ID AAE0453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Region
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     2 × 3
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beta subunit and Jun. The invention relates to a
hormone (hill) beta subunit and Jun. The invention relates to a
concentral of parts and Jun. The invention relates to a
method of forming a cysteine knd Jun. The invention dealers to a
beta-subunits comprising attending a dimerisation domain (DD) to either
the N-terminal of both subunits or the N-terminus of the alpha-subunit and
to the N-terminal of both subunits or the N-terminus of the alpha-subunit and
to the N-terminus of the beta-subunit and dimerisation the products to form
a heterodimeric protein analog (III) The method is used to produce
a nalogues (sqonists or anatagonists) of deglycosylated glycoprotein
hormones, porteinfally useful, e.g. for treating infertility where caused
to polycystic ovarian disease (associated with excessive levels of
intentising hormone). Products that retain DD's are also useful as
call sequences, Attachment of a DD (which may be removed later)
and allows the combination of heterodimers, that have similar structures
cand thus receptor-bidding and immunogenic properties to native dimers,
and allows the combination of subunits that would otherwise combine
conditied without loss of activity, and attachment of the DD reduces
formation of homodimers have longer circulation times in
                                              ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovariad ilsease; hCG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                         Gaps
                                                                                                            2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                              6
71.6%; Score 556.5; DB 12; Length 122; 83.6%; Pred. No. 3.5e-43; Live 2; Mismatches 10; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HLH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                AAY43279 standard; Protein; 181 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 4; Fig 17; 73pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US08018.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-JAN-2000 (first entry)
  Ouery Match
Best Local Similarity 83.69
Matches 107; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYNE-) UNIV NEW JERSEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-620431/53.
                                                                                                                                                                                                                                                              122 SKAPPPSL 129
                                                                                                                                                                                                                                                                                                      115 --- PLPSI 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9953065-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-ocr-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY43279;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                             RESULT 184
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This sequence is a fusion protein of hid and Jun. The invention craited to a method of forming a cystelle knot protein (1) having alpha and beta-subunits comprising a traching a dimeriality protein (1) having alpha and beta-subunits comprising attaching a dimerialation domain (DD) to ceither the N-termin of both subunits or the N-terminus of the products to form a heterodiment of the beta-subunit and dimeriality captures to form a heterodiment of protein analog (1). The method is used to produce analogues (agonists or antagonists) of deglycosylated cylopprotein hormones, potentially useful. A for treating infartility where caused by polycystic ovarial disease (associated with excessive levels of intensing hormone). Products that retain DD are also useful as inno acid sequences). Attachment of a DD (which may be removed later; and thus receptor-binding and immunogenic properties) to native dimers, and thus receptor-binding and immunogenic properties) to native dimers, and thus receptor-binding and immunogenic properties) to native dimers, cand allows the combination of subunits that vould othersies combination of subunits that vould othersies completed poorly, or not at all. The N-terminal part of a glycoprotein hormone my poorly, or not at all. The N-terminal part of a glycoprotein hormone my formation of homodimers. Heterodimers have longer circulation times in vivo than individual subunits:
                                                                                                                                                                                    Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; bea subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Match 2014%; Score 555; DB 20; Length 242; Local Similarity 86.8%; Pred. No. 9.5e-43; Local Similarity 86.8%; Manatches 9; Indels 0; Gaps 899; Conservative 6; Mismatches 9; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HLH beta subunit-Jun fusion protein sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 6; Fig 18; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0059625.
                                                                                   19-JAN-2000 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 242 AA;
                                                                                                                                                                                                                                                                                                                        Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                     W09953065-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-0CT-1999.
                                  AAY43286;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Si
Matches 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 187
AAY43293
ID AAY4329
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to human single chain forms of the glycoprotein chormone quartet which is an aganist or antagonist of luterinising hormone common decrease the control of the control of simple chain becomes a control of the co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ther DNA or RNA encoding single chain protein useful in treating infertulity, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 186
AAY43286
ID AAY43286 standard; Protein; 242 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 9; Column -; 87pp; English.
94US-0199382.
94US-0289396.
94US-0310590.
94US-034628.
94US-0351591.
95US-0475049.
                                                                                                                                                                                                             (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                     WPI; 2001-366474/38.
                                                                                                                                                                                                                                                                    Bolme I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 234 AA;
18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 SKAP 125
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11-FEB-1992 (first entry)

AAY43293;

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The sequence is an analogue comprising amino acids 1-118 of mature hGC beta subunit having residues 102-107, 109, 10, and 112-118 replaced by the corresponding residues in the hESH protein. It was prepd. by site directed mutagenesis of a cDNA sequence encoding the hGC bets subunit. The chimmert o hormone is capable of directing hormone binding to both lA and FSH receptors and may be useful for the treatment of infertility in men and women and the promotion of fertility in male and female animals. (See AAR1504.) AAR15061-R15125 and AAR15161-R15125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNTR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; glycoprotein hormone; infertility; in vivo fertilisation; single chain gonadotropin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New glyco-protein hormone analogues - for inducing fertility a 
immuno-castration agents, for suppressing reproductive system 
development and as immuno-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match

11.34; Score 553; DB 12; Length 118;
Best Local Similarity 92.84; Pred. No. 6, 98-43;
Makerhes 103; Conservative 2; Mismatches 6; Indels (
                                                                                                                                                                                                               Glycoprotein hormone; fertility; immuno-castration;
Immuno-confragestive; vaccine; human chorionic gonadotropin;
follicle stimulating hormone; FSH; CG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Single chain gonadotropin analogue #7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAU04608 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Table II; Page 61; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900S-0520703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                91WO-US03162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYNE-) UNIV MED NEW JERSEY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Campbell RK, Moyle WR;
                                                                                                                            hCG/hFSH chimera, B10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 118 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9116922-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-NOV-1991.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US6242580-B1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 189
AAU04608
ID AAU0460
NAME OF STREET O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence is a fusion protein of HLM and Jun. The invention cleares to a method of forming a cysteine knot protein (i) having alpha careliates to a method of forming a cysteine knot protein (ii) having alpha can beta -subunits comprising attaching a dimerisation domain (DD) to either the Wremania of both subunits or the Wremania of the cather the Cremania of the beta-subunit and dimerising the products to form a heterodimeric protein andlog (II). The method is the products to form a heterodimeric protein andlog (II). The method is cleared to produce analogues (sgonists or antagonists) of deglycosylated glycoprotein hormones, potentially useful. e.g. for treating infertility where caused by polycystic ovarian disease (associated with excessive the as immunogenes or antigens (since a bo may containing highly antigenic and manuogenes or antigens (since a bo may containing highly antigenic cannon acid sequences). Attachment of a bo (which may be removed later) facilitates the formation of heterodimers, that have similar structures and allows the combination of subunits that would otherwise combines, and allows the combination of subunits that would otherwise combines. Company of subunities that would otherwise combines to company of subunities that would otherwise combines.
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                                                                                                                                                                                                                                                   Cysteine knot protein; protein formation; heterodimeric protein analog; deglycosylated glycoprotein hormone; infertility; immunogen; antigen; polycystic ovarian disease; hGG; human; chorionic gonadotrophin; beta subunit; therapy; Jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Methods for producing heterodimers, particularly analogues of hormones, from subunits of cysteine knot proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 SKRPLAPRCRPINATLAVEKECPVCITVATTICACYCPHTRULGOVLPALOQVVCNYR 61 | 11111 | 1111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 71.4%; Score 555; DB 20; Length 242;
Best Local Similarity 86.8%; Pred. No. 9.5e-43;
Matches 99; Conservative 6; Mismatches 9; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           189 DVRFESIRLPGCPRGVDPVVSFPVALSCRCALCRRSTSDCGGPKDHPLTCDHPQ 242
                                                                                                                                                          HLH beta subunit-Jun fusion protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR15070 standard; Protein; 118 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 6; Fig 19; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US08018.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0059625,
                                                                             19-JAN-2000 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 242 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09953065-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-0CT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR15070;
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AAR15070
ID AAR1507
XX
AC AAR1507
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0; Gaps

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The invention relates to human single chain forms of the glycoprotein charmone quarter which is an agonist or antagonist of lutterinists hormone content which is an agonist or antagonist of lutterinists hormone (TH), follicle stimulating hormone (FSH), thyroid stimulating hormone (TSH), thyroid stimulating hormone (TSH), thyroid stimulating hormone (TSH), thyroid stimulating hormones are beterodimers or forms of single chain hormones are used in treating infertility, as aids in vivro fertilisation techniques, and other therapeutic methods in vivro fertilisation techniques. And other therapeutic methods or associated with the mative hormones. The single chain hormones are useful as research of antibodies with respect to the native proteins in bological samples, as control respects, as disquastic tools to cetect the presence of antibodies with respect to the native proteins in bological samples, as control respects in detecting and purifying creeptors to which the native hormones bind. The single chain hormones are used as purification tools for subsequent preparations of these meterials and to monitor clavels of single chain hormones administered as drugs. The single chain of subsequent preparations of these meterials and to monitor of subsequent preparations of these meterials and to monitor of subsequent preparations of these meterials and to monitor of subsequent preparations specifically immunoreactive cutth these new compounds, as substitutes for the heterodiments forms of hormones. The present sequence is human single chain gonadotropin
                                                                                                                                                                                                                                                                                                                                                                                           121.134
/note- "Corresponds to 95-108 amino acids of human follicle stimulating hormone (FSH) beta-subunit*
135.142
/note- "Laturer peptide"
143.234
/note- "Corresponds to 1-92 amino acids of human slugle chain gonadotropin alpha-subunit*
                                                                                                         Human; single chain gonadotropin analog no:7; anti-infertility; drug; peptide therapy; lutefathising hormone; IH; follicle stimulating hormone; FSH; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG; glycoprotein; infertility; fusion protein.
                                                                                                                                                                                                                                                                                                                   /note-*Corresponds to 1-100 amino acids of human chorionic gonadotropin (CG) beta-subunit*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New DNA or RNA encoding single chain protein useful in treating infortility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                        Human single chain gonadotropin analog no:7.
                                                                                                                                                                                                                                                                                                       Location/Qualifiers
21..120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 9; Fig 11; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          940S-0199382.
940S-0289396.
940S-0310S90.
940S-034628.
940S-0351S91.
950S-0475049.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-0918288
                        04-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UNIW ) UNIV WASHINGTON
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N-PSDB; AAD08797.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Boime I, Moyle WR;
                                                                                                                                                                                                                              Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US6238890-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-2001.
                                                                                                                                                                                                                                                                                                    Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Region
                                                                                                                                                                                                                                                                                                                                                                                                 Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Region
         The sequence represents the amino acid sequence of single chain gonadortopin nanloque #7. The giveportoein homome analogue #8. The giveportoein homome analogue is conductorpin analogue #8. The giveportoein homome analogue is conducted analogue #8. The giveportoein homome analogue with new compounds, as a substitute for the heterodinaric forms of the homomes, in the treatment of infortility as an aid for in vivo fertilisation con techniques, and in other therapoutic methods associated with the native portions are regert in a manner similar to the heterodinar, as a dispositic tool to detect the presence of antibodies with respect to the native proteins in the presence of antibodies with respect to the native proteins in the levels of these homomes in various samples, and in detecting and to puritying receptors to which the native homomes bind. The single chain forms of the heterodinars to honodinars have the following advantages over their dimeric forms: they are more stable, problems of recombinant production are reduced since only a single gene is needed to transcribe, translate and process, provide an alternate form thus permitting fine tuning of activity levels and of in vivo half lives. Single chain forms are unique starting materials for identifying truncated forms with the protein to be engineered without disturbing the overall folding of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                    New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match 71.2%; Score 553; DB 22; Length 234; Best Local Similarity 85.5%; Pred. No. 1.14e-2; Rocal Matches 105; Conservative 0; Mismatches 18; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLGGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGYLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 190
AMEDI480
ID ARBO4480 standard; Protein; 234 AA.
X AAEO4480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 11; Fig 11; 86pp; English.
                                                                                    9705-0918288.
9405-019382.
9405-0289396.
9405-0314628.
9405-0314628.
9505-0475049.
                                                99US-0282357
                                                                                                                                                                                                                                                                                                 (UNIW ) UNIV WASHINGTON.
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N-PSDB; AAS08497.
                                                                                                                                                                                                                                                                                                                                              Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 SKAP 125
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                                             31-MAR-1999;
                                                                                          25-AUG-1997;
18-FEB-1994;
12-AUG-1994;
                                                                                                                                       12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAX-1997;
05-JUN-2001.
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//note- "Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
165..142
1/35..142
1/31..334
//note- "Linker peptide"
1/31..334
//note- "corresponds to 1-92 amino acids of human single chain gonadotropin alpha-subunit"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; single chain gonadotropin analog no:3a; anti-infertility; drug; peptide therapy; luteinising hormone; Lif; follicle stimulating hormone; FSB; thyroid stimulating hormone; TSB; chorlonic gonadotropin; CG; glycoprotein; Infertility; fusion protein; mutant; mutein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRPQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The single-chain gonadotropin analogue 3a (human LH-beta(1-114) (MSM)-linker-human GG-alpha(1-92) (MSM) can be derived from analogue 3 by removing at least one of the glycosylation sites. The partially deglycosylated analogue has anti-lutefinisting hormone (lutropin) activity and can be used for facilitating hormative, terminating pregnancy and reducing analogue secretion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
21..134
/note= "Corresponds to 1-114 amino acids of human buteinising hormone (LH) beta-subunit"
50
                                                                                                                                                                                                                                                                                                                                            Methods for altering fertility in mammals, egp. humans - e.g. stimulating fertility by reducing the activity and/or levels circulating slyco-protein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 71.0%; Score 552; DB 15; Length 234; Best Local Similarity 80:0%; Pred. No. 1.76-42; Best Local Similarity 6: Mismatches 18; Indels (Matches 10); Conservative 6; Mismatches 10); Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 24; Fig 8 and Page 60; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human single chain gonadotropin analog no:3a.
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             95WO-US02067.
                                                                       94US-0199382.
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                                                                                                                                                                                                                                                                                 WPI; 1995-302553/39.
                                                                                                                                           (SENS-) SENSI-TEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Misc-difference
             17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141 GSAP 144
                                                                       18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04 - SEP - 2001
                                                                                                                                                                                                                  Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAE04510;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
Region
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AAR04451
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analog no:7 related to the invention. Analog no:7 is a fusion protein consisting of human chorinci organdorroul (GG) beta subunit (1.100 amino acids) and follicle stimulating hormone (RSH) beta subunit (9-108 amino acids) fused to human single chain gonadorroph alpha subunit (1.92 amino acids) Ar a linker sequence. This analog serves as a useful starting momender compound for remplate directed vaccine design and for the development of hormone-specific vaccines for use in humans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1..20
//abel-leader
21..334
//abel-him_beta_subunit_(1-114)
ence 50
force "wild-type Asn at position 30 of the beta-
subunit is pref. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              // note- "wild-type Asm at position 52 of the alphasthunit is pref. replaced by another amino acid (esp. Gin) to remove a glycosylation site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Misc-difference 220
/note= "wild-type Asn at position 78 of the alphasubunit is pref. replaced by another amino acid (esp. Gln) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Single chain gonadotropin; human chorionic gonadotropin; hCG; phpha; beta; subunit; analogue; glycoprotein hormone; fertility; inhibit; stimulate; increase; lutropin; luteinising hormone; LH; follicle stimulating hormone; FSH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Partially deglycosylated single chain gonadotropin analogue 3a.
                                                                                                                                                                                                                                                                                                                                            Owery Watch 71.2%; Score 553; DB 22; Length 234; Best Local Similarity 85.5%; Pred. For 0.1.44-42; Matches 106; Conservative 0; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1135.142
7/abbi-1nnker
143.234
7/abbi-Gonadotropin_alpha_subunit_(1-92)
194
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR86261 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                             Sequence 234 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Misc-difference
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 SKAP 125
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
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Peptide
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The sequence is an analogue of mature hCG beta subunit having several residues replaced by the corresponding residues in the bovine LH protein and residues 23-145 deleted. The chimeric hormone may be useful for identifying residues which are important for binding to the human receptor and may also have applications as an immunogen, apoints and/or antagonist.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Opery Match 70.7%; Score 549.5; DB 12; Length 122; Best Local Similarity 78.1%; Pred. No. 1.5-42; Operative 7; Mismatches 10; Conservative 7; Mismatches 12; Indels 9; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New glyco-protein hormone analogues - for inducing fertility as farmon-castration agents, for suppressing reproductive system development and as famino-contragestive vaccines.
                                                                                                                                                                                                                                                                                                                                                                            Glycoprotein hormone; immuno-castration;
immuno-contragestive, vaccine; human chorionic gonadotropin;
luteinising hormone; LH: GG; bovine.
                                                                                                                                                                                                             AAR15105 standard; Protein; 122 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Table IV; Page 63; 94pp; English.
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                                                                                                                                                                                                                                                                                             11-FEB-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Campbell RK, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1991-353528/48.
                                                                                                                                                                                                                                                                                                                                   hCG/bLH chimera, D9.
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                                                                 122 SKAP 125
                                                                                                        141 GSAP 144
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Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-MAY-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-NOV-1991.
                                                                                                                                                                                                                                                      AAR15105;
                                                                                                                                                                 RESULT 193
AAR15105
ID AAR1510
XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to human single chain forms of the glycoprotein formone quartet which is an agonist or antagonist of intellating hormone conformed quartet which is an agonist or antagonist of intellating hormone (18), follicle stimulating hormone (18), follicle stimulating hormone are agonist or encloned standard properties of the stimulating hormone are used to the standard alpha bormones are add in the subunits. The agonist forms of single chain hormones are used in trendentic methods associated with the native hormones. The single chain hormone are useful as reagents in a manner similar to heterodimera, as dispossit tools to detect the presence of antibodies with respect to the native proteins in biological samples, as control reagents in assay kits for assessing the cereptora to which the native hormones blud, the single chain hormones respinance of antibodies with respect to the native proteins in biological samples, as control reagents in assay kits for assessing the cereptora to which the native hormones blud, the single chain hormones are also used in affinity chromatographic preparation of receptors or antibonemy and proteins of antibodies. They are used as purification tools for solution of aubsequent preparations of these materials and to monitor levels of single chain hormones administered as purificating immunoracity of human single chain hormones administered as furge. The single chain of human single chain manner of hormones. The present sequence is human single chain or as a useful candog on: as a single than or and antipodical specific vaccines for use in humans. Consisting or human single chain genedotropin appression or human single chain genedote accide) by a linker sequence. This analog serves as a useful exectlopment of human large chain genedotropin apples submit (1-19 amino acide) by a linker sequence. This analog serves as a useful exectlopment of human single chain genedotropin apples submit (1-19 amino acide) by a linker sequence. This analog serves as a useful search sequence i
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0
/note-"Wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"

Misc-difference 720

/ note-" wild type Asn substituted with Xaa, Where Xaa refers to Gin or other amino acid"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro ferrilization techniques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 9; Column -; 87pp; English.
                                                                                                                                                                                                                                              940S-0199382.
940S-0289396.
940S-0310S90.
940S-0334628.
950S-0475649.
970S-0853524.
                                                                                                                                                                                                             97uS-0918288.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Boime I, Moyle WR;
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                                                                                                                                                                                                           25-AUG-1997;
                                                                                                                                                                                                                                              18-FEB-1994;
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1994;
09-MAY-1997;
                                                                                                                           US6238890-B1.
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Anote- Corresponds to 95-111 amino acids of human folice stimulating hormone (FSH) beta-subunit*
Anote- Linker peptide*
Anote- "Lorresponds to 1-92 amino acids of human single chain gonadorropin alpha-subunit*
                                                                                                                                                                                                                                                                                                                            Human; single chain gonadotropin analog no:6; anti-infertility; drug;
peptide therapy; lutefinising hormone; LB; follicle stimulating hormone;
FSB; thyroid stimulating hormone; TSH; chorionic gonadotropin; CG;
glycoprotein; infertility; fusion protein.
                                        21 SKEPLRPRCRPINATIAVEREGCPVCITVNTTICAGYCPTHTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note-*Corresponds to 1-100 amino acids of human
charlonic gonadotropin (GG) beta-subunit*
121..137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New DNA or RNA encoding single chain protein useful in treating infertility, as aids in vitro fertilization techniques, or other therapeutic methods associated with the native hormones
                                                                                                                                                                                                                                                                                                    Human single chain gonadotropin analog no:6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
21..120
                                                                                                                                                                                                              AAE04479 standard; Protein; 237 AA.
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94US-0289396.
94US-0310590.
94US-034628.
94US-0351591.
95US-0475049.
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N-PSDB; AAD08795.
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Synthetic.
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12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-JUN-1995;
09-MAY-1997;
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                                                                                                      122 S 122
                                                                                                                                141 $ 141
                                                                                                                                                                                                                                          AAE04479;
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Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The sequence represents the amino acid sequence of single chain good additional analogue 16. The givectoreden homeone analogue 18. The givectoreden homeone analogue 18. Condedtropin analogue 16. The givectoreden homeone analogue 18. Condedtropin analogue 18. The givectoreden homeone and the condedtropin analogue 18. The sequence of the condedtropin and the retraction of the chain profess an analogue of the homeone. The single chain profess as a dispose of the native hormone. The single chain profess is a disposet to the native protein in a character in the condess of antibodies with respect to the native proteins in the broadge of antibodies with respect to the native proteins in the conditional condess of antibodies with respect to the native proteins in the broadge of antibodies with respect to the native proteins in the presence of antibodies with respect to the native proteins in the presence of antibodies with respect to the native proteins in the proteins of recording to which the fative homeones bind. The single chain comes of the heterodianes or homeofamers have the following advantages over that dimeric forms: they are more stable, problems of recombinant production are reduced since only a single spen is needed to transcribe, trainate and process, provide an alternate form thus permitting fine tuning of activity levels and of in vivo half lives. Single chain forms are unique starting analorism for identifying truncated forms with the cativity of the dimer. The linkage between the subunits permits the protein to be engineered without disturbing the overall folding of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques
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Best Local Similarity 86.0%; Pred. No. 3.3e-42;
Matches 104; Conservative 2; Mismatches 15; Indels 0; Gaps
                                                                                                                                                  Human; glycoprotein hormone; infertility; in vivo fertilisation;
single chain gonadotropin.
                                                                                                                    Single chain gonadotropin analogue #6.
AAU04607
ID AAU04607 standard; Protein; 237 AA.
XX
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                                                                                                                                                                                                                                                                                                              97US-0918288.
94US-0199382.
94US-0289396.
94US-031628.
94US-0334628.
94US-0351891.
95US-0475649.
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                                                                                      (first entry)
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N-PSDB; AAS08495.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 237 AA;
                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                        US6242580-B1.
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18-FEB-1994)
12-AUG-1994;
22-SEP-1994;
04-NOV-1994;
07-DEC-1994;
07-JUN-1995;
09-MAY-1997;
                                                                                    23-OCT-2001
                                                                                                                                                                                                                                                                                  31-MAR-1999;
                                                                                                                                                                                                                                                    05-JUN-2001.
                                                        AAU04607;
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The invention relates to human single chain forms of the glycoprotein hormone quartet which is an agonist or artagonist of lutefulsing hormone (LH), follicle stimulating hormone (FSH), thyroid stimulating hormone (TSH), thy or chorionic gonadokropin (GG). All these hormones are heterodimers

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us-09-813-398-3.default.rag

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nce 99
// Anote - wild-type val at position 79 of the beta-
subunit is replaced by Thr to agree with the
121..129
// Alabel - hFSH_beta_subunit_(95-103)
// Alabel - hFSH_beta_subunit_(95-103)
// Alabel - hFSH_beta_subunit_(95-103)
// Alabel - DRFH beta_subunit_amino acid 104)*
// Alabel - DRFH
// Alabel - IAA
// Alab
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The single-chain gonadotropin analogue 8b (human CG-beta(1-100) (N13X, N30X,P78X,T97]-RESIP-beta(55-103)-DDPR-linker-human CG-alpha (1-92)[N32X,N30X,P79]-RESIP-beta(55-103)-DDPR-linker-human CG-alpha having an extra glycosylation site. Addition of oligosaccharides has a positive effect on stability of hormones in circulation and can be used to present unwanted antibody or receptor interactions. The present analogue has anti-follicle stimulating hormone (follitropin and and and and and anti-lutenising hormone (follitropin) and cautiful for treating ovarian hyperstimulation and reducing spermatogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note- "wild-type Pro at position 78 of the beta-
subunit is replaced by another amino acid
to agree with the glycosylation site motif"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Anote- "wild-type Asm at position 52 of the alpha-
subunit is pref. replaced by another amino
acid (esp. Gin) to remove a glycosylation
site*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "wild-type Asm at position 78 of the alphasubunit is pref. replaced by another amino acid (esp. Gin) to remove a glycosylation site."
            acid (esp. Gln) to remove a glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Methods for altering fertility in mammals, esp. humans - e.g. stimulating fertility by reducing the activity and/or levels of circulating slyco:protein hormones having lutropin activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      70.3%; Score 546; DB 16; Length 234;
84.7%; Pred. No. 6e-42;
ive 0; Mismatches 19; Indels (
                                                                        /note- "Arg corresponds to CCG codon" Misc-difference 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 25; Fig 13 and Page 60; 102pp; English.
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Best Local Similarity 84.7
Matches 105; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   220
/note= "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1995-302553/39.
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                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W09522340-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-AUG-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Region
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having identical alpha subunits and differing beta subunits. The agonist forms of single chain hormones are used in treating intertility, as aids can vitro fertilisation techniques, and other therapeutic methods associated with the native hormones. The single chain hormones are useful cassociated with the native hormones. The single chain hormones are useful cast reagants in a manner similar to heterodimers, as diagnostic tools to detect the presence of antibodies with respect to the native proteins in the biological samples, as control reagents in assay kits for assessing the biological samples, as control reagents in assay kits for assessing the creeptors to which the native hormones blind the single chain hormones antibodies. They are used as purification to receptors or antihomone antibodies the hormones and the constructions of these materials and to monitor levels of single chain hormones antibodies specifically manuforeactive with these now compounds, as substitutes for the heterodimeric forms of chain on ordinate as substitutes for the heterodimeric forms of caston protein consistant of human chorionic gonadocropin (CC) beta subunit (1:100 manno acids) and follicle stimulating hormone (18) lines of subunit (1:100 manno acids) and follicle stimulating hormone (18) and a sequence. This analog serves to subunit (35:11) anino acids) fused to human single chain gonadocropin of the new accurace. This analog serves to subunit (35:11) anino acids) its as inhere accurace. This analog serves to consist starting compound for template directed vaccine design and consistence of the subunit of the humans.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              force wild-type Asn at position 13 of the beta-
force subunit 1s pref. replaced by another amino
acid (esp. Gln) to remove a glycosylation
site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Misc-difference 50
/note= "wild-type Asn at position 30 of the betasubunit is pref. replaced by another amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Single chain gonadotropin; human chorionic gonadotropin; hCG; phphs, beta; subunit; analogue; glydeprotein hormone; fertility; inhibit; stimulate; increase; lutropin; luteinising hormone; LH; follicle stimulating hormone; ESH; vaccine; contraceptive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 70.7; Score 549; DB 22; Length 237; Best Local Similarity 86.0%; Pred. No. 3.34-6.7 Matches 14; Conservative 2; Mismatches 15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
1..20
1..20
21..120
21..120
/label- hCG_beta_subunit_(1-100)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR86276 standard; Protein; 234 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 237 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-MAY-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR86276;
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Peptide
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AAR86276
AAR86276
AAR862776
AAR86277
AAR8627
AAR862
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Gaps

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The sequence represents the amino acid sequence of human luteinising characters subunit, amino acids lill. The protein is an anomone beta subunit, amino acids lill. The protein is an anomone beta subunit and the protein hormone heterodimer, along with chorionic gonador or proper certain hormone heterodimer, along with chorionic gonador or proper protein hormone fresh, thyroid stimulating control or protein the protein are useful for generating but differing beta subunits. The proteins are useful for generating but differing beta subunits. With the native hormones, in the treatment of intertility, as the encodiment forms of the hormones, in the treatment of intertility, as cateful for in two fertilisation techniques, and in other therapeutic cateful that the native hormones. The single chain proteins as diagnostic tools to detect the presence of antibodies with respect to the native hormones and in detecting and purifying receptors to which the native hormones can did nother bornones and in detecting and purifying receptors to which the native hormones to hind. The single chain forms of these hormones in various samples, and in detecting and purifying receptors to which the native hormones to hind. The single chain forms of these hormones in the proteins in the proteins in the proteins and in detecting and purifying receptors to which the native hormones control. The single chain forms of these hormones in the proteins in the proteins and the single chain forms of these hormones are proteins in the proteins and in detecting and purifying receptors to which the native hormones control reagents of recombinant production are reduced since only a single gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; chorionic gonadotropin; hCG; glycoprotein hormone; infertility; luteinisism hormone; Lif; follicle stimulating hormone; PSH; thyroid stimulating hormone; TH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New single chain forms of the glycoprotein hormone quartet useful for generating antibodies specifically immunoreactive with the new compounds, in treating infertility, or as aids for in vivo fertilization techniques.
                                                               Human luteinising hormone beta subunit, amino acids 1-114.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 19; Column 35; 86pp; English.
                                                                                                                                                                                                                                                                                                                                                                          AAU04622 standard; protein; 114 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0918288.
94US-0199382.
94US-0289396.
94US-0334628.
94US-0351591.
95US-0475049.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-OCT-2001 (first entry)
       Matches 98; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Boime I, Moyle WR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-424301/45.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo saptens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-JUN-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-FEB-1994,
12-AUG-1994,
22-SEP-1994,
04-NOV-1994,
07-DEC-1994,
07-JUN-1995,
09-MAY-1997,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                  AAU04622;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      A method has been developed for predicting the likely timing of the chast of menopause for a perimenopausal female. The method comprises of obsert of menopause for a perimenopausal female. The method comprises of determining the amount of human luterinising hormone beta core fragment (hilf-beta of in a sample from the subject by: (a) confacting a sample of with an antibody (ab), which specifically blinds to hilf-beta of full beta of hilf-beta of the measuring the amount of hilf-beta of in the sample determined in step (b) with the amount of hilf-beta of in the sample determined in step (b) with the amount of hilf-beta of in the subjects sample and indicates campled. In the known postmenopausal or premenopausal female subject, where an amount of hilf-beta of in the sample similar to the level in the known postmenopausal or premenopausal female subject sample and indicates of hilf-beta of menopause. An hilf-beta of hilf-beta of menopause. An hilf-beta of hilf-beta a temporal distance from the onset of menopausal contacterize hilf-beta a temporal distance from the onset of menopause. An hilf-beta of his been sendoral distance from the onset of menopause of chast been sendoral distance from the onset of menopause of chast been sendoral distance from the onset of menopause of chast beta been sendoral distance from the onset of menopause of chasted from the menopause of the present of the present and in men. The methods can be used to characterize hilf-beta of expression in the urine of both reproductive and perimenopausal female, assessing ovarian function and to determine the effect of predicting the likely timing of the onset of menopause of cor a contacterize hilf-beta effects of the presents and hilf-beta fragment used in the contact of the present invention.
Determination of human luteinising hormone beta core fragment in urine samples, useful for predicting onset of menopause
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; luteinising hormone; beta core fragment; hLH; menopause;
urine; antibody; hLH-beta cf.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Birken S, Kovalevskaya GI, Maydelman Y, O'Connor JF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human luteinising hormone beta fragment.
                                                                                                                                                                                                                                                                                                           AAY29594 standard; protein; 122 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 162; 165pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYCO ) UNIV COLUMBIA NEW YORK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-US02279.
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                                                                                                                                                                                                                                                                                                                                                                                                                           15-OCT-1999 (first entry)
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                                                                                                            122 SKAP 125
                                                                                                                                                                    141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W09939202-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo saptens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-FEB-1998;
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                                                                                                                                                                                                                                                                                                                                                                   AAY 29594;
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70.1%; Score 545; DB 20; Length 122; 84.5%; Pred. No. 3.8e-42;

Query Match Best Local Similarity

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properties, compared to wild type CKGFs, are claimed. The CKGF superfamily comprises at least four families of growth factors: the capperfamily comprises at least four families of growth factors the gly opported in hormones, the platelet-derived growth factor-bally, the charmed mentoric phinis and the transforming growth factor-ball family; the configurate known to be structurally similar (especially comprising the cysticines for topology) and it was shown that mutations at certain of the CKGF superfamily could shown that mutations at certain cartificiantly could significantly alter the biological activities of the CKGF.

The material properfamily could significantly alter the biological care also useful to treat or prevent hypothypicidism (claimed). They can also useful to treat or prevent hypothypicidism (claimed). They mutant heteroclamer or analogue to stimulate iodic superial phinistering the content or analogue to stimulate iodice uptake, and considered and subsequently administering radiolabeled iodine to treat the cancer or enables radiolabel detection (claimed).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The patentors claim a vaccine effective against mammalian fertility comprising a vaccinia virus genome having disposed unit, in a non-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contraceptive; fertility control; vaccine; reproductive hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Obery Match 70.00; Score 544; DB 21; Length 121; Best Local Similarity 85:11; Pred. No. 4.78-42; Matches 9; Conservative 6; Mismatches 11; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence of human beta luteinising hormone (LH).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAP60602 standard; Protein; 141 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85US-0756847.
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N-PSDB; AAN60524.
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 121 AA;
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04-JUN-1985;
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is needed to transcribe, translate and process, provide an alternate form thus permitting fine tuning of activity levels and of in vivo half lives. Single chain forms are unique starting materials for identifying truncated forms with the activity of the dimer. The linkage between the subunits permits the protein to be engineered without disturbing the overall folding of the protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This is the wild type human luteinizing hormone beta subunit. Mutants comprise at least one electrostatic charge altering mutation in a beta hairpin loop, resulting in increased bisoctivity. Mutant cystine Knot growth factor (CKEP) proteins comprising one or more mutant subunits and having novel properties or improved pharmacological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human luteinizing hormone; beta subunit; CKGF; mutant;
cystine knot growth factor; hairphi loop; thyroid stimulating hormone;
TSH; hypothyroidism; thyroid cancer.
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/abel- beta_hairpin_loop_1
1.33
/note= "mutant optionally comprises one or more
substitutions in these residues, preferably
a basic residue*
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/label- beta_hairpin_loop_3
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Domain
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ID AAY9200
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essential region, a DNA sequence of formula : (Hormone)n; n= 1-20; Hormone- DNA sequence destrived from the sequence encoding a reproductive hormone. The hormone is esp. LH, GnRH, CO Or FSH.

Sequence 141 AA:

Ouery Match 70.0%; Score 544; DB 7; Length 141;
Best Local Similarity 85.1%; Pred. No. 5.44-42;
Matches 97; Conservative 6; Mismatches 11; Indels 0; Gaps

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924-6	1-5 239-256-2 305-639-2	e 9	169-569-20	69	34-	20.	34.0	70-	- v	-94	4.4	39-	952	85-1	82	09-443B-15	53	53-	5.00	85-	45-	45-8 R0-3	08	4 10	52-	95-7	47-	0-60	35	06	0.0	5-0	4	-64	77	110	92-	71-	9-171-945 8-709-924	-60	-709-948-18	24-11	2	6-1	37-1	. 67
80	719 08-3	152	80	8	-80	89	7-80 7-80	9-4	550-	09-1	- 60 - 80	-80	08-4	08-4	-80	800	8	08-7	9-70	07-8 08-8	08-7	08-7	8	07-E	5-80	0-60	08-3	08-5	08-7	-60	1-60	020	90	1-60	-60	2	0	00	0	28	80	- 80	-029	-039	07-9 08-6	֚֚֡֝֟֝֟֜֜֝֟֜֜֝֟֜֜֟֜֜֟֓֓֓֓֓֓֓֓֓֜֜֜֜֜֓֓֓֓֜֜֜֜֓֡֓֜֜֜֓֡֓֜֜֡֓֡֩֡֡
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66 8.5 1139 5 PCT-0895-08154A-2 66 8.5 1111 2 105-08-140-309-4 66 8.5 1111 2 105-08-140-309-4 66 8.5 1111 2 105-08-140-309-4 66 8.5 1111 2 105-08-140-309-4 66 8.5 1111 2 105-08-140-309-4 66 8.5 1111 2 105-08-140-309-4 66 8.5 1111 2 105-08-140-309-4 66 8.5 1111 2 105-08-140-309-4 67 8.6 1111 2 105-08-140-309-4 68 8.6 1111 2 105-08-140-309-4 68 8.6 1111 2 105-08-140-309-4 68 8.6 1111 2 105-08-140-309-8 69 8.6 1111 2 105-08-140-309-8 69 8.6 1111 2 105-08-140-309-8 69 8.6 1111 2 105-08-140-309-8 60 8.6 1111 2 105-08-140-309-	"		.1 11 2 US-08-7/09-924-7 Sequence 11 2 US-08-7/09-925-7 Sequence 11 4 US-08-709-948-7 Sequence 67 1 US-08-471-780C-126 Sequence	.1 67 1 US-08-467-282B-126 Sequence. 1 67 2 US-08-41-1282A-126 Sequence. .1 67 2 US-08-466-710C-126 Sequence.	.1 67 3 US-08-468-739C-126 Sequence 1 253 4 US-09-042-765A-4 Sequence 1 770 2 IIS-08-773-368-1 Sequence	1 270 3 05-09-199-887-1 Sequence 1 605 4 US-09-042-785A-23 Sequence	.1 655 3 US-08-959-382-2 .1 655 4 US-09-527-216A-2	.1 814 4 US-US-013-015-4 Sequence .0 81 4 US-09-920-018-4 Sequence .0 81 2 US-08-744-670-4 Sequence	81 2 05-09-149-933-4 Sequence 191 2 05-08-290-665A-178 Sequence	Constitution A and	ALIGNAENTS		ication US/08475213	ION:	APPLICANT: Geysen, Hendilk M. TITLE OF INVENTION: Method for the use and Synthesis of	TION: Peptides BNCS: 11	Chicago Control Control Chicago Chicag	ville	4	BLE FORM:	Floppy disk BM C compartible	atentin Release #1.0, Version #1.30	ATION DATA: NUMBER: US/08/475,213	07-JUN-1995 JN: 530	ION DATA:	06-SEP-1991	NUMBER 2015 NUMBER 2015 16 PR 2015	ION DATA:	NUMBER: AU PJZ788/89 17-FEB-1989	INFORMATION:
66 8.5 1139 5 PCT-USS9-08354A-2 Sequence 66 8.5 1111 2 US-08-7-6-7-7-4 Sequence 65.5 8.4 1211 2 US-08-7-6-7-7-4 Sequence 65.5 8.4 1211 2 US-08-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-	ិស្តិស្តិស្តិស្តិស ភេសសសសសស ឧសសសសសស	နေတာက်တွင် ကို ကို ကို ကို ကို ကို ကို ကို ကို		8888	999	693	888	62.5	62.5			RESULT 1	. Sequence 10, Appl	GENERAL INFORMAT	TITLE OF INVENT	NUMBER OF INVENTION:	ADDRESSEE: C	CITY: Emery	COUNTRY: USA	COMPUTER READAL	COMPUTER: II	SOFTWARE: Pe	SURRENT APPLICATION 1	; FILING DATE:	; PRIOR APPLICATION P	FILING DATE:	APPLICATION	PRIOR APPLICATI	; APPLICATION P ; FILING DATE:	ATTORNEY/AGENT INFORMATION: NAME: Green, Grant D.
66 66 66 66 66 66 66 66 66 66 66 66 66	Sequence 2, Appl1 Sequence 4, Appl1 Sequence 7, Appl Sequence 76, Appl Sequence 5, Appl Sequence 5, Appl Sequence 5, Appl	Sequence 5, Appli Sequence 2, Appli Sequence 2, Appli Sequence 19, Appl		Sequence 7, Appli Sequence 7, Appli Sequence 24, Appli		Sequence 24, Appl Sequence 24, Appl Sequence 2, Appli	Sequence 2, Appl1 Sequence 12, Appl	Sequence 2, Appli Sequence 606, App Sequence 3, Appli	2, 10,	ທຸທຸເ	ń ~	, ώ,	- 7 7	12,	18.	Sequence 18, Appl	Sequence 1, Appli			Sequence 8, Appli							. 4.	,	4,	ی ن
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Length 145;

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(S-09-142-320-13)

(S-09-142-320-13)

Sequence 13, Application US/09142320

Patent No. 5194154

CENERAL INFORMATION:

APPLICAMT: Bellst, Dominique

APPLICAMT: Bellst, Joan-Michel

APPLICAMT: Lazar, Vidaud, Michel

TITLE OF INFORTION: ALGIGNAMT HUMAN CELL TRANSFORMATION DETECTION NETHOD

FILE REPERREC: 05691/0140

CURRENT APPLICATION NUMBER: US/09/142,320
                                                                                                                                                                                                                                                                                                                                                                   61 DVRFESIRLPGCPRGVMPVVSYAVALSCQCALCRRSTTDCGGPKDHPLICDDPRFQDSSS 120
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                                                                                                                                                                                                                             Query Match 99.1%; Score 770; DB 4; Length 145; Best Local Similarity 100.0%; Pred. No. 1.3e-6; Matches 140; Conservative 0; Mismatches 0; Indels Matches 140; Conservative 0; Mismatches 0; Indels
                                                                                      Query Match 99.1; Score 770; DB 2; Length 14 Best Local Smilarity 100.00; Pred. No. 1.3e-66; Matches 140; Conservative 0; Mismatches 0; Indels Matches 140; Conservative 0; Mismatches 0; Indels
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08-09-142-320-12
1 Sequence 12, Application US/09142320
2 Patent No. 6194154
CENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: PRT
; ORGANISM: human
US-09-142-320-12
         US-08-395-238-2
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Sequence 2. Application US/08395238
PRICANT: 128ACS, Nell Willilam
APPLICANT: 128ACS, Nell Willilam
APPLICANT: LAFTHORN Aditan Jonathan
APPLICANT: LAFTHORN Aditan Jonathan
APPLICANT: LAFTHORN Aditan Jonathan
APPLICANT: LAFTHORN Aditan Jonathan
APPLICANT: LAFTHORN Aditan
TITLE OF INVENTION: THREE DIMENSIONAL HORNONE STRUCTURE
CORRESSONDEMCE ADDRESS:
ADDRESSES:
ADDRESSES: ALCO NOBEL PATENT DEPARTMENT
STREE: MARTALN
COUNTRY: NOUVED STADES
ZIP: 20850
ZIP: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
99.1%; Score 770; DB 1; Length 145;
Best Local Similarity 100.0%; Pred. no. 1.3e-66;
Matches 140; Conservative 0; Mismatches 0; Indels
Matches 140; Conservative 0; Mismatches 0; Indels
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BETA-SUBUNIT HUMAN CHORIONIC GONADOTROPIN
REFERENCE/DOCKET NUMBER: 0240.002
TELECONKUNICATION INFORMATION:
TELEPHONE: 510-601-2706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPAR: 110-655-342

IRPORMATION FOR SEG ID NO: 10

SEQUENCE CHARACTERISTICS:
LDANTH: 145 Amino acids
TYPE: manho acids
TYPE: manho acids
TYPE: manho acids
TYPE: no acids
TYPE: no acids
TYPE: TYPE: peptide
TYPE: TYPE: peptide
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US-08-395-238-2
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GENERAL INFORMATION:
APPLICANT: Bellet, Dominique
APPLICANT: Bellet, Dominique
APPLICANT: Bellet, Dominique
APPLICANT: Hellet, Dominique
APPLICANT: Vidadu, Michell
APPLICANT: Vidadu, Michell
APPLICANT: Vidadu, Michell
TITLE CE INVENTION: MALIGNAT HUMAN CELL TRANSPORMATION DETECTION METHOD
FILE REPERENCE: 065691/0140
CURRENT PAPLICATION NUMBER: 1059-04
CURRENT FILING DATE: 1998-09-04
CURRENT PALING DATE: 1998-09-04
CURRENT PARLICATION NUMBER: RR 96 02683
EARLER PAPLICATION NUMBER: RR 96 02683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 60
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Fatent No. 623890
Fatent No
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CONTRY: USA
CONFORTER READALE FORM:
MEDIUM TYPE: Diskette
COMPUTER: LBM COMPATIBLE
COMPUTER: LBM COMPATIBLE
COMPUTER: LBM COMPATIBLE
COMPUTER: FarsExp for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/918,288
                                             ; Sequence 15, Application US/09142320
; Patent No. 6194154
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APPLICATION NUMBER: 08/853,524
FILING DATE: 09-MAY-1997
APPLICATION NUMBER: 08/199,382
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 SKAPPPSLPSPSRLPGPSDT 141
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; ORGANISM: human
US-09-142-320-15
                US-09-142-320-15
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U. 6.94-14.

Sequence 14. Application US/09142320

APPLICAT: Bellact. Dominique

APPLICAT: Bellact. Dominique

APPLICAT: Hander. Dominique

APPLICAT: Vidad, Michel

APPLICATION MIMBER: US/09/112,320

CORRENT APPLICATION NUMBER: US/09/142,320

SARALER APPLICATION NUMBER: PG-22

SARALER FILING DATE: 1997-02-28

SARALER FILING DATE: 1997-03-04

NUMBER OF SEQ ID NOS: 2.0

SEQ ID NOS: 4.

SED ID NOS: 4.

LENGTH: 145
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
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CURRENT FILING DATE: 1998-09-04
RANLER APPLICATION NUMBER: PCT/FR97/00361
RANLIER FILING DATE: 1997-02-28
REALIER FILING DATE: 1997-02-8
RANLIER FILING DATE: 1999-03-04
NUMBER OF SEQ ID NOS: 24
SEGWARE: PatentIn Ver. 2.0
SEQ ID NO 113-01-145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
CRGANISM: human
US-09-142-320-13
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; ORGANISM: human
US-09-142-320-14
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RESULT 6

Length 145;

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Query Match 99.1%; Score 770; DB 4; Length 14; Best Local Similarity 100.0%; Fred. No. 1.3e-66; Matches 140; Conservative 0; Mismatches 0; Indels
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(US-08-910-288-3)

(US-08-910-388-3)

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COMPUTE RADADLE PORM:
MEDIUM TYPE: Distette
COMPUTER: IN COMPATIBLE
OPERATIVE SYSTEM:
OPERATIVE SYSTEM:
OPERATIVE SPECTON DATA:
APPLICATION NUMBER: US/08/918,288
CLASSIPICATION:
PRIOR APPLICATION
PRIOR APPLICATION:
APPLICATION:
PRIOR APPLICATION:
APPLICAT
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FILING DATE: 09-NAY-1997
APPLICATION WHABER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/ACENT INFORMATION:
NAME: MUTSSHIGE, KATE H
REGISTRATION WHABER: 29,959
REFERENCE/CACET WHABER: 29,959
TELECHONE: 202-887-1500
TELECHONE: 202-887-1500
TELECHAX: 202-887-0763
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TELEX: INFORMATION FOR SEQ ID NO: 68: SEQUENCE CHARACTERISTICS: LENGTH: 145 anino acids TYPE: anino acid STRANBENESS: single: TYPE: TOPOLOGY: Inear IDS-09-282-157-68
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SEQUENCE CHARACTERISTICS:
LENGTH: 265 amino acids
TYPE: amino acid
STRANDEDNESS: single
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21P: 20006-
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1 SKEPLRRFCRPINATLAVERESCCVCITVNTTICAGYCPTHTRVLGGVLPALDQVVCHYR 60
1 SKEPLRRFCRPINATLAVERESCCVCITVNTTICAGYCPTHTRVLGGVLPALDQVVCHYR 60
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Query Match

10, 18, Score 170; DB 4; Length 145;
Best Local Similarity 100.04, Pred. No. 1.3e-66;
Matches 149; Conservative 0; Mismatches 0; Indels

Matches 149; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                        29,959
FP: 29500-20050.25
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RECISTRATION WIMBER: 29,959
REFERENCE/DOCKET NUMBER: 29500-20050.25
TELECHMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
      FILING DATE: 18-FEB-1994
ATTORNEY TACKET INFORMATION:
NAME: MALZEMING KATE H
RELIGENTION NUMBER: 29,559
REFERENCE/NOCKET NUMBER: 2950
TELECOMMUNICATION INFORMATION:
TELEPRING: 202-887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SCO ID NO: 68: SEQUENCIES CHARACTERISTICS; LENGTH: 145 anino acids TPE: anino acid STRANDEDRESS: single TOPOLOGY: linear
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62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                 21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTHTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                           2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
          99.1%; Score 770; DB 4; Length 265; 100.0%; Pred. No. 2.6e-66; Live 0; Mismatches 0; Indels
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; CREEAL INFORMATION IT TO IT TO IT TITLE OF INVESTION SINGLE-CHAIN FORMS OF THE TITLE OF INVESTION SINGLE-CHAIN FORMS OURFET STREET: 2000 Pennsylvania Avenue, NW, suite 5500 STATE: DC
COUNTRY: USA
COMMITTY: USA
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COMMITTY: USA
COMMITTY: USA
COMMITTY: USA
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COMPUTER: INH Compatible
OFFRATING STREM: DOS
OFFRATING STREM: DOS
OFFRATING STREM: DOS
CURRENT FAPLICATION HOWER: US/09/282,357
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FILING DATE:
CLASSIFICATION: 536
FRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/918, 288
FILING DATE: 28 AUG-1997
APPLICATION NUMBER: 08/853,524
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORIEY AGENT INFORMATION:
THE STATEMENT ON THE STATEMENT OF TH
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REGISTRATION NUBER: 29,959
REPERRECEONCENT WINBER: 29,959
TELECOMMUNICATION INFORMATION:
TELECHONE: 202-887-1500
TELEFAX: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.0°
Matches 140; Conservative
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SEQUENCE CHARACTERISTICS:
LENGTH: 265 amino acids
TYPE: amino acid
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                                                                                                                                                                                                                                                                                                 0; Gaps
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Sequence 39, Application US/08918288
Setent No. 6238891
GENERAL INFORMATION:
APPLICART: BOILE, ITYING
APPLICART: BOLLE, ITYING
TITLE OF INVERTION: GINCOPROTEIN HORMONE QUARTET
NUMBER OF SEQUENCES: 83
CORRESCORDENCE MAY
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CITY: Washington
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CITY: Washington
STREET: DIAMETER
COMPUTER: DA
COUNTRY: USA
TITE: DIAMETER
COMPUTER: IDIAMETER
COMPUTER: PLIAMETER
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PILING DATE: 18-FEB-1994
ATORNEY/ACENT INCORMATION:
NAME: MILABAIGE, KAE H
REGISTRATION NUMBER: 29,59
FREERROKE/CONCER NUMBER: 29,59
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-687,1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
CLASSIFICATION
FRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
APPLICATION NUMBER: 08/853,524
FILING DATE: 09-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 39:
SEQUENCE CHARACTERISTICS:
LENGTH: 265 maino acids
TYPE: amino acid
STRANDENRESS: 9ingle
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
US-08-918-288-3
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FELEFAX: 202-887-0763
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MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-918-288-39
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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61

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81 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPRFQDSSS 140

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GENERAL INFORMATION: APPLICANT: Gallo, Robert C.
                                                                               122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                     141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 99.31
Matches 139; Conservative
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; MOLECULE TYPE: protein
US-08-709-924-2
                                                                                                                                                                                                                                                    RESULT 13
US-08-709-924-2
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                                                                                                                                                      62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRPQDSSS 121
                                                                                                            62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
21 SKEPLRPRCRPINATLAVEKEGCPVCITVWTTICAGYCPTWTRVLGGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 265;
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Best Local Smilarity 100.0%; Pred. No. 2.6e-66; Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                    STATE: DC
COMPARY: USA
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: TBM COMPACIBLE
COMPUTER: TBM COMPACIBLE
COMPUTER: TBM COMPACIBLE
COMPACIBLE OS
SOFTWARE: FASTSED FOR WINDOWS VERSION 2.0
CURRENT APPLICATION DATA:
FILING DATE: US/09/282,357
FILING DATE: 35 AUG-1997
FILING DATE: 18-FEB-1994
FILING DATE: 18-FEB-19
                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 39:
SEQUENCE CHARACTERISTICS:
LENGTH. 265 amino acids
TYPE: maino acid
STRANDENESS: Single
TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: protein : FRAGMENT TYPE: internal US-09-282-357-39
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICART: Campbell, Robert
TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and
TITLE OF INVERTION: Altered Receptor Binding Same
TITLE OF INVERTION: Methods For Preparing and Using Same
TITLE OF INVERTION: Altered Receptor Binding Same
TITLE OF INVERTION: A Maccino
STREE: P.O. Sox 1267
CITY: Princeton
STREE: New Jersey
COMPTRY: USA
COMPTRY: USA
COMPTRY: INP Compatible
COMPTRY: INP COMPTRY: STREE
COMPTRY: INP COMPTRY: STREE
COMPTRY: INP COMPTRY: STREE

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Opery Match 165: 98.7%; Score 767; DB 4; Length 165; Best Local Shilarity 99.3%; Pred. No. 2.9e-66; Matches 139; Conservative 1; Hismatiches 0; Indels Matches
                   MEDIUM TYPE: Floppy disk
COMPOTRE: IBM PC COMPALLA
COMPOTRE: IBM PC COMPALLA
CONTRACT BREATH RELEASE #1.0, VERSION #1.30
SUSTWARE: PETENTIN RELEASE #1.0, VERSION #1.30
SUSTWARE: PETENTIN RELEASE #1.0, VERSION #1.30
APPLICATION NUMBER: US/08/709,948
FILLNG DATE: 09-SEP-1996
CLASSIFICATION: APPLICATION HORBER: US/08/709
ATTORNEY/ACRMT INFORMATION:
NAME: HISTOCK, S. LESILE
REFERENCE/OCCKET NUMBER: 3669-016
TELEPRATION NUMBER: 18,879-016
TELEPRATION NUMBER: 18,879-106
TELEPRATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LEENTH: 165 AMINO CLICK
TYPE: AMINO CLICK
TYP
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US-08-709-948-2
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US-08-425-673-1
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APPLICANT: Bryant, Joseph, Anto
APPLICANT: Hardfileshadar, Yanto
ITILE OF INVENTION: FREATHER AND PREVENTION OF CANCER BY
ITILE OF INVENTION: TREATHER AND PREVENTION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROPIN
COMPESSEE: Pounie & Edmonds Lip
STREET: 1155 Avenue of the Americas
CITIL: New York
COUNTRY: UGS
CITIL: New York
COUNTRY: UGS
COUNTRY
COUNTRY: UGS
COUNTRY: UGS
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COUNTRY: UGS
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Patent No. 519504
APPLICANT Gallo, Robert C.
APPLICANT: Brant, Joseph
APPLICANT: Brant, Joseph
APPLICANT: Brant, Joseph
APPLICANT: REARMENT NA PREVENTION OF HIV INFECTION
TITLE OF INVENTION: TREARMENT AND PREVENTION OF DERIVATIVES OF HUMAN CHORIONIC CONADOTROF
CORRESPONDENCE ADDRESS:
ADDRESSES: Pennie e Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 10036-2711
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: New York
STATE: New York
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
US-08-709-948-2
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Sequence 1, Application US/09299109B
Sequence 1, Application US/09299109B
SEQUENCE NO. S674727
GENERAL INFORMATION:
THIE OF INVENTION: No. 5674727el Methods for Detecting Reproductive
TITLE OF INVENTION: Cancer of Tuncis and Assay Products
TITLE OF INVENTION: Therefor Tuncis and Assay Products:
THIE OF INVENTION: Laurence A. Cole , c/o Dept. of Obstetrics and
STREET: Jail Cedar Street
CITY: New Howen
CITY: Onnecticut
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                           Query Match 98.34; Score 764; DB 1; Length 145; Best Local Similarity 99.34; Pred. No. 4.9e-64. Metches 139; Conservative 0; Hismatches 1; Indels Matches 139; Conservative 0; Hismatches 15
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WEDDING TYPE: 3.5 "diskette

WEDDING TYPE: 3.5 "diskette

COMPUTER: INH PC compatible

PORTATIG STEER: Microsoft Word 7.0

COMPUTER: ALCOSOFT WINDOWS 95

SOFTWARE: Microsoft Word 7.0

COMPUTER: ALCOSOFT WORD PC.

CLASSIFICATION WINDOWS 105/31/94

ATTORNEY/AGENT HOTOWATION:

AND WEST STEER CE/POCKET NOMER: 28, 917

RESISTENCE/POCKET NOMER: 28, 917

RESISTENCE/POCKET NOMER: 28, 917

RESISTENCE/POCKET NOMER: 38, 917

FELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TOPOLOGY: UNKNOWN

OFFICIAL TYPE: SABUNIT OF TO HORDONE, SPECIFICALLY THE

POLICIAL TYPE: SABUNIT OF PAGE

ORTGINAL SOURCE: human utile
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NAME/KEY: beta subunit of hCG that is nicked by GBNE LOCATION: hCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IDENTIFICATION METHOD: N-terminal sequence analysis PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS: Keutmann et alla
TITLE: "A Receptor-binding Region in Human
JOURNAL: Proc Nat'l Acad Sci USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 SKAPPPSLPSPSRLPGPSDT 140
                   ; TOPOLOGY: linear; MOLECULE TYPE: pept.; HYPOTHETICAL: NO ; ANTI-SENSE: NO US-08-425-673-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 18
US-08-298-189B-1
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APPLICANT: Campbell, Robert R.
APPLICANT: Campbell, Robert R.
TTILE OF INVENTION: Allege of Glycoprotein Hormones Having
TTILE OF INVENTION: Altered Receptor Binding Specificity and Activity and
TTILE OF INVENTION: Altered Receptor Binding Specificity and Activity and
TTILE OF INVENTION: Altered Receptor Binding Specificity and Activity and
TTILE OF INVENTION: Methods For Preparing and Using Same
NUMBER OF SEQUENCES: 12
CORRESPET: P.O. Box 1267
CITY: Princeton
STATE: New Jersey
CONNTRY: USA
CONNTRY: USA
CONNTRY: USA
CONNTRY: TRE PRODEY GIAL
CONNTRY: TRE CONDETTION TOWNERS
CONNTRY: TRE CONDETTION TOWNERS
CONNTRY: TRE CONDETTION TOWNERS
CONTRY: TREASE CONDETTION TOWNERS
CONTRY: TREASE CONDETTION TOWNERS
CONTRY: TREASE GIAL
CONTRY: TREASE
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CLASSIPICATION: 514
PRIOR APPLICATION SATA: 07/717,151
FILING DATE: 18-JUN-1991
ATTORNEY/AGENT THYORAKITON:
NAME: MUCCINO, RICHARD R.
REGISTRATION WINNER: 12,539
REFERENCE/DOCKEY NUMBER: 12,539
TEREMONE/DOCKEY NUMBER: 10,0004
TELECOMMUNICATION:
REGISTRATION NUMBER: 32,538
REPERREACPOCKET NUMBER: UND 1
TELECOMMUNICATION INFORMATION TELEPHONE
TELECHAIR (609) 466-2160
TELEPAX: (609) 466-2160
TELEPAX: (609) 466-2160
SEDUENCE CHARACTERISTICS:
LENGTH: 145 amino acids
TYPE: TYPE: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/08425673
Patent No. 5508261
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ANTI-SENSE: NO
US-08-425-673-1
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US-08-425-673-2
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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                           Query Match 98.3%; Score 764; DB 4; Length 181; Best Local Similarity 99.3%; pred. No. 6.3e-66. Metches 139; Conservative 0; Hismatches 1; Indels Matches 139; Conservative 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match

98.3%; Score 764; DB 4; Length 181;
Best Local Similarity 99.3%; Pred. No. 6.3e-66;
Matches 139; Conservative 0; Mismatches 1; Indels
Matches 199; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 20
Sequence 16, Application US/09282357
Sequence 16, Application US/09282357
Patent NO 6445580
GENERAL INFORMATION:
APPLICANT: MOLICE, MILLIAM R.
APPLICANT: SINGLE-CHAIN FORMS OF THE
TITLE OF INVENTION: GLYCOPROTEIN HORMONE QUARTET
NUMBER OF SEQUENCES: 83
CORRESSEE: MORRISON & FORRSTER
STREE: CORRESPENCE OF MORRISON APPLICATION OF STREET
STREET STREET CONTINUES.
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COMPUTER READABLE FORM:
MEDIUM TYPE: DISAFETE
COMPUTER READABLE FORM:
MEDIUM TYPE: DISAFETE
COMPUTER READABLE FORM:
COFFRANTING SYSTEM: DOS
SOFTWARE: FASISTO FOR WINDOWS VERSION 2.0
CURRENT APPLICATION DATA:
FLILNG DATE:
FLILNG DATE: 35 AUG-1997
FLILNG DATE: 35 AUG-1997
FLILNG DATE: 09 -HAY-1997
FLILNG DATE: 09 -HAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122 SKAPPPSLPSPSRLPGPSDT 141
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SEQUENCE CHARACTERISTICS:
LENGTH: 181 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: internal US-09-282-357-36
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TOPOLOGY: linear
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Sequence 36, Application US/08918289
GENERAL INFORMATION:
APPLICANT: BOTHE, Irving
TITLE OF INVENTION: GICCOPROTEIN HORMONE QUARTET
MINMER OF SEQUENCES: 83
CORRESSEE: HORRESSEE: 83
CORRESSEE: HORRESSEE: MARSHINGTON & FORRSTER
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CITY: Washington
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
COUNTRY: USA
APPLICANTON AND ATA:
COMPUTER READALE FORM:
COMPUTER READALE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATIBLE
OFERRAING: SESTEM: DOS
COMPUTER: IBM COMPATIBLE
OFERRAING SESTEM: DOS
COMPUTER: IBM COMPATIBLE
OFERRAING: SESTEM: DOS
COMPUTER: PRICATION NATA:
PRICATION APPLICATION DATA:
PRICATION APPLICATION AP
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RILING DATE: WOMBERS: 08/853,524
FILLING DATE: WOMBERS: 08/853,524
FILLING DATE: 09-MAY-1997
APPLICATION WINDERS: 08/199,382 A
FILLING DATE: 18-EFB-1994
ATTORNEY/AGENT INFORMATION: WARE: 18-EFB-1994
REPERMES_POOCET WINDERS: 29,959
REPERMES_POOCET WINDERS. 29,959
REPERMES_POOCET WINDERS_POOCET WINDERS_P
VOLUME: 84
ISSUE: No. 5674127 applicable
PAGES: 2038-2042
DATE: 1987
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APPLICANT: Bellet, Dominique
APPLICANT: Bellet, Jean-Wichel
APPLICANT: Vidaud, Michel
APPLICANT: Lazar, Viadinit
TITLE OF INVENTION: MALIGNANT HUMAN CELL TRANSFORMATION DETECTION METHOD
FILE REPRENCE: 065691/0140
                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNTR 61
                                                                                                                                                                                  ;
                                                                                                                                     96.5%; Score 750; DB 4; Length 145; 97.9%; Pred. No. 1.1e-64; Live 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 96.3%; Score 748; DB 4; Length 145; Best Local Similarity 97.3%; Pred. No. 1.7-e-6. Westers 137; Conservative 0; Wismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTHER INFORMATION: Xaa at position 117 is an Ala or Asp
US-09-142-120-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION: Xaa at postition 2 is a Lys or Arg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Xaa at position 4 is a Pro or Met FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT PELLOGATION UNDER: US/09/142,320
CURRENT PILIGO DATE: 1998-09-04
EARLIER PILIGO DATE: 1998-09-04
EARLIER FILING DATE: 1998-09-04
EARLIER FILING DATE: 1996-09-04
EARLIER FILING DATE: 1996-03-04
SOFTWARE: PRICH DATE: 1996-03-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION: consensus sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4, Application US/09142320 Patent No. 6194154 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                             122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                    121 SKAPPPSLPSPSRLPGPSDT 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : SOFTWARE: Patentin Ver. 2.0
SEO ID NO 11
: LEWOTH: 145
TYPE: PRT
: ORGANISM: human
US-09-147-320-11
                                                                                                                                        Query Match
Best Local Similarity 97.9%
Matches 137; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: human
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 23
US-09-142-320-4
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FEATURE:
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US-09-142-320-11
Sequence 11, Application US/09142320
Sequence 11, Application US/09142320
Sequence 11, Application US/09142320
Sequence 11, Application US/09142320
Sequence 11, Application US/091454
SPEIGANT: Belact, Jean-Hichel
APPLICANT: Bladt, Jean-Hichel
APPLICANT: Usadu, Michel
SPEIGE REPERRORS: 065-91/0140
CURRENT FILE REPERRORS: 065-91/0140
CURRENT FILE REPERRORS: 065-91/0140
CURRENT FILE NO. NUMBER: US/09/142,320
CURRENT FILE PREJICATION NUMBER: PS/07/02-28
SARLIER PLILE PREJICATION NUMBER: FR 96 02683
EARLIER PLILE APPLICATION NUMBER: FR 96 02683
                                                                                                                                                                                                                                                                                                                                          APPLICANT: Bellet, Dominique
APPLICANT: Bellet, Dominique
APPLICANT: Bellet, Dominique
APPLICANT: Hadar, Jean-Michel
APPLICANT: Lazar, Viadand, Michel
APPLICANT: Lazar, Viadand, Michel
APPLICANT: Lazar, Viadand, Michel
TITLE OF INVENTION: MALGAINT HUMAN CELL TRANSFORMATION DETECTION METHOD
CURRENT APPLICANTON WHERE: US/09/142,320.
CURRENT APPLICANTON WHERE: US/09/142,320.
EARLIER FILING DATE: 1996-03-7/PR97/00361
EARLIER FILING DATE: 1997-02-28
EARLIER FILING DATE: 1996-03-04
NUMBER: PELNG DATE: 1996-03-04
SEQ ID NOS: 24
SEQ ID NOS: 24
SEQ ID NO 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                         61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRAGASS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR4QDS$S 121
0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 98.1%; Score 762; DB 4; Length 145; Best Local Similarity 99.3%; Pred. No. 7,6e-66; Matches 19; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                    RESULT 21
105-09-1220-16
1 Sequence 16, Application US/09142320
2 Patent No. 6194154
3 GENERAL INFORMATION:
                                                                                                                                                          122 SKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                               141 SKAPPPSLPSPSRLPGPSDT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: human
US-09-142-320-16
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8 PRCRPINATLAVEREGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYRDVRFES 67
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                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER REACHELE FORM:
MEDIUM TYEE: Floppy disk
COMPUTER: TBM PC compatible
FILING NAPELICATION NOMBER: US/08/804,166
FILING NATE: TBM PATH:
CLASSIFICATION:
FILING NATE: 20 FEBTUARY 1996
COMPUTER: CO
TITLE OF INVENTION: HYBRID PROTEINS
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSE: BROMDY AND NEIMARK
ADDRESSE: BROMDY AND NEIMARK
STREET: 419 Sevenih Street N.W., Ste. 300
STREET: Washington
STREE: D.C.
COUNTRY: U.S.
LIP: 22207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: BROWDY AND NEIWARK
STREET: 419 Seventh Street N.W., Ste. 300
CITY: Mashington
STATE: D.C.
STATE: D.C.
IIP: 22207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 26
US-08-910-91-4
US-08-910-911-4
Sequence 4, Application US/08910991
Patent No. 139417
Patent No. 149417
Patent 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION UNBER: 25,61 REFERENCE/DOCKET NUMBER: CTELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATI
NAME: Browdy, Roger L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: Linear

MOLECULE TYPE: protein
US-08-804-166-4
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                                                                                                                                                                                                                                                                     GEMERAL INTORANTION WILLIAM R.

APPLICANT: CAMPOBEL, NO.

TITLE OF INVERTION: Analogs of Glycoprotein Hormones Having
TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and
TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and
TITLE OF INVERTION: Hethods For Preparing and Using Same
NUMBER OF SEGUENCES: 1.

CONFESSEE: RICHARGE NUCCION
STREE: NO. DEA 1867
CONFETT: BAY NUCCION
STREE: NOW JESSY
CONFUTER: HER PC COMPABLE
COMPUTER: THE PC COMPABLE
COMPUTER: 18 PC COMPABLE
COMPUTER: 18 PC COMPABLE
COMPUTER: 18 PC COMPABLE
COMPUTER: 19 PC COMS NG-DOS
SOFTHARE: PACINITY Release #1.0, Version #1.25
CLASSIFICATION NUMBER: US/08/425,673
FILING DATE: 18-JUN 1991
ATTORNEY/AGENT TROPRAKTION:
REDIETRATION RICHAR RE
RESERENCE/NOCKER NUMBER: 18-JUN 1991
REPERENCE/NOCKER NUMBER: 18-JUN 1991
REPERENCE/NOCKER NUMBER: 110-ANA
REPERENCE/NOCKER NUMBER: 110-ANA
REFERENCE/NOCKER NUMBER: 110-ANA
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                                                                                                                                     Sequence 10, Application US/08425673
Patent No. S508261
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4, Application US/08804166
Patent No. 6193972
GENERAL INFORMATION:
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Jameson, Bradford A.
Chappel, Scott C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               122 SKAPPPSLPSPSRLPGPSDT 141
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HOLECULE TYPE: peptide
HYPOTHETICAL: NO
US-08-425-673-10
                                                     RESULT 24
JS-08-425-673-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 25
US-08-804-166-4
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8 PRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLGGULPALPQVVCNTRDVRFES 67
119 PRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLGGVLPALPQVVCNTRDVRES 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAPPP 127
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Ouery Match

Ouery Match

10.01; Score 740, DB 4; Length 336;

Best Local Similarity 100.01; Pred. No 2.5e-65;

Matches 134; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 28
US-08-19-91-8
US-08-10-91-8
Sequence 8, Application US/08910991
Patent No. 619317
GENERAL INFORMATION:
APPLICANT: Campbell, Robert K.
APPLICANT: Campbell, Robert K.
APPLICANT: Chappel Scott C.
APPLICANT: APPLICANT: Chappel Scott C.
APPLICANT: APPLICANT: Chappel Scott C.
APPLICANT: APPLICANT: STATE OF C.
APPLICANT: Washington Street N.W., Ste. 300
GIT: Washington Street N.W., Ste. 300
GIT: Mashington Street N.W., Ste. 300
GIT: P. 2200
COUNTRY: USA
COUNTRY: USA
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LBM PC Compatible
COMPUTER: LBM PC COMPATION
APPLICATION NAME: PATENTIN Release #1.0, Version #1.30
FILING DATE:
FILIN
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PRIOR APPLICATION DATA:
APPLICATION UNDERS: 08/804,166
FILING DATE: 20 February 1997
PRIOR APPLICATION DATA:
APPLICATION DATA:
FILING DATE: 20 February 1996
ATTORNEY/AGENT INFORMATION:
                                   20 February 1996
                                                                                                                                                                     25,618
FILING DATE: 20 February CLASSIFICATION:
ATONNET/AGENT INFORMATION:
NAME: BROWNY, ROGER L.
REGISTRATION NUMBER: 25.6"
REFERENCE/DOCKET NUMBER:
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                              INTERENA: (202) 737-1528
INTORAKTON FOR SED ID NO: 8: SEQUENCE CHARACTERISTICS: LENGTH: 336 amino acids TYPE: amino acid TYPE: amino acid TYPE: amino acid TYPE: amino acid TYPE: protein US-08-804-166-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAPPP 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 95.2%; Score 740; DB 4; Length 307; Best Local Similarity 100.0%; Pred. No. 2.2e-6; Indels Matches 14; Conservative 0; Mismatches 0; Indels
                 COMPUTER: IBM PC compatible
COMPUTER: SYSTEM: PC DOS,NAD.
CORRENT APPLICATION RELEASE #1.0, Version #1.30
CORRENT APPLICATION NATA:
FLILNO DATE:
FLILNO DATE:
FLILNO DATE:
FLILNO DATE:
CLASSIFICATION: 530
RIOR APPLICATION NUMBER: 08/604,166
FLILNO DATE: 20 February 1997
APPLICATION NUMBER: 60/011,956
FLILNO DATE: 10 February 1996
ATTOMET /AGET INFORMATION:
NAME: VINN NATION: 10 FEBRUARY 1996
ATTOMET /AGET INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: FLOSPPy disk
COMPUTER: IBM PC compatible
OPERATUR SYSTEM: PC-DOS/MS-DOS
OPERATUR SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Campbell, Robert K.
APPLICANT: Campbell, Robert K.
APPLICANT: Jameson, Bradford A.
APPLICANT: Chameson, Bradford A.
TITLE OF INVENTION: HYBRID PROTEINS
TUTLE OF INVENTION: HYBRID PROTEINS
CORRESPONDENCES: 22
CORRESPONDENCES: 22
CORRESPONDENCES: 23
CORRESPONDENCES: 300
CITY: Mashlagton
STATE: D.C
COUNTRY: USA
IIP 22207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 27
09-08-804-166-8
09-08-804-166-8
Squence 8, Application US/08804166
Patent No. 613972
GENERAL INFORMATION:
APPLICART: Campbell, Robert K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: CANE
TELECOMOUNCATION HOROMACTION:
TELECOMOUNCATION HOROMACTION:
TELECAM: (202) 73-35-36
INFORMATION FOR SED ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 307 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ION NUMBER: 37,971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
HOLECULE TYPE: protein
US-08-910-991-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    128 SLPSPSRLPGPSDT 141
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1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                           2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                             Ouery Match 83.4%; Score 648; DB 4; Length 234; Best Local Similarity 95.7%; Pred. No. 18-54. Matches 118; Conservative 0; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match 83.4%; Score 648; DB 4; Length 234; Best Local Similarity 95.2%; Pred. No. 1e-54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 6. Application US/09282357
Patent No. 6242580
Patent No. 6242580
CARREAL INFORMATION: TITLE OF THE TITLE OF INTENTION: SINGLE-CHAIN FORMS OF THE TITLE OF INTENTION: GLITCOPROTEIN HORMONE QUARTET NUMBER OF SEQUENCES: 83
CORRESPONDENCE: 03
CORRESPONDENCE: 03
CORRESPONDENCE: 04
CITT: MASHINGTON & FORESTER
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: DIASALDIA FORM:
MEDIAN TOTAL DIASALE FORM:
MEDIAN THE DIASALE FORM:
MEDI
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APPLICATION NUMBER: US/09/282,357
CLASSIFICATION: 336
CLASSIFICATION: 35 AUG.1997
APPLICATION DATA:
APPLICATION WINBER: 08/918,288
FILING DATE: 03-MAT-1997
APPLICATION WINBER: 08/19,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGENT UNMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGENT UNMBER: 08/199,382
FILING DATE: 18-FEB-1994
TELECOMMUTCATION INFORMATION: NAME: MULESTATION INFORMATION: TELECOMMUTCATION INFORMATION:
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INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
LENGTH: 234 anino acids
TYPE: anino acid
         ; FRAGMENT TYPE: internal US-08-918-288-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-09-282-357-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 SKAP 125
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: BOINE, ITVING
APPLICANT: BOINE, ITVING
APPLICANT: BOINE, ITVING
APPLICANT: MOTICE, MILIAM R.
TITLE OF INVENTION: GLACOPROTEIN BORNOR QUARTET
TITLE OF INVENTION: GLACOPROTEIN BORNOR QUARTET
NUMBER OF SOGUENCES: 83
CORRESONDENCES: 83
CORRESONDENCES: 83
CORRESONDENCES: 84
CORRESONDENCES: 85
CORREST: 2000 Pennsylvania Avenue, NM, suite 5500
CITY: Neahington
STATE: GOA
CONTINENT GUAR
ENGLANGE FORM:
MEDIUM TYPE: DIskette
COMPUTER: IRAM COMPALIBLE
OPERATING SYSTEM: DOS
SOFTWARE: REASESO FOR Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/918,288
FILING DATE:
CLASSIFICATION:
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APPLICATION NUMBER: 09/202,357
FILING DAFE: 09-ARX: 09/202,357
FILING DAFE: 09-ARX: 1997
APPLICATION NUMBER: 08/653,524
FILING DAFE: 10-ERB-1994,382
FILING DAFE: 18-FEB-1994
APPLICATION NUMBER: 08/199,382
REJESTATION NUMBER: 29,959
REFERENCE/COCKET NUMBER: 29,959
REPERENCE/COCKET NUMBER: 29,959
REPERENCE/COCKET NUMBER: 29,959
TELECPHONICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 19
08-08-918-38-6
i Sequence 6, Application US/08918288
: Patent No. 6238990
; GENERAL INFORMATION:
INFORATION FOR SED ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 356 maino ecids
ITPRE: maino ecid ecid
TOPOLOGY: linear
FOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: (SEQUENCE CHARACTERISTICS: LENGTH: 234 amino acida TYPE: amino acida STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               128 SLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          318 SLPSPSRLPGPSDT 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: protein
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0; Gaps

6; Indels

0; Mismatches

Matches 118; Conservative

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61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 114
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPRDHPLTCDDPR 114
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                                                                                                                                      RESULT 32
US-09-382-357-69
Sequence 69, Application US/09282357
Setent No. 642350
GENERAL INFORMATION
GENERAL INFORMATION
TITLE OF INVENTION SINGLE-CHAIN FORMS OF THE TITLE OF INVENTION GIACORPORTER HORMORE GUARTETS
NUMBER OF SEQUENCES: 83
CORRESPONDENCE 83
CORRESPONDENCE 183
CORRESPONDENCE 183
CORRESPONDENCE 183
COUNTRY: USA
STATE DC STATE DC STATE
COUNTRY: USA
COUNTRY: USA
COUNTRY USA

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTE: IBM Compatible
COMPUTE: IBM Compatible
OPERATING STERM: DOS
SOFTWARE: PASICED for Windows Version 2.0
CURRENT MEVICATION DATA:
FILING DATE:
CLASSIFICATION NUMBER: US/09/282,357
FILING DATE: 35 MC-1997
APPLICATION NUMBER: 08/918,288
FILING DATE: 25 MC-1997
APPLICATION NUMBER: 08/9183,524
FILING DATE: 18-PEB-1994
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-PEB-1994
ATTOREX AGENT: 18-PEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Wurashige Kate H
FEGISTRATION UNDERS: 29,959
REFERENCE/DOCKET NUMBER: 29500-20050.25
TELECHMUNICATION INFORMATION:
TELECHMUNE: 202-887-1500
TELEFAX: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 24, Application US/08918288
Parent No. 6238890
GENERAL INFORMATION:
APPLICANT: BOHE, ITVING
APPLICANT: WOILE, William R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INPORMATION FOR SEQ ID NO: 69: SEQUENCE CHARACTERISTICS: LENGTH: 114 amino acids TYPE: amino acid STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TOPOLOGY:
US-09-282-357-69
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                                                                                                                                                                                                                               0; Gaps
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912-08-918-328-69

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2.1P: 20066-188
2.1P: 20066-189
COMPUTER READABLE FORM:
MEDIUM TYPE: Distette
COMPUTER: IBM COMPAILINE
OPERATING: STSTEM: DOS
SOFTWARE: PASTEGN FOR WINDOWS VERSION 2.0
CURRENT APPLICATION NUMBER: US/08/918,288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9500-20050.25
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APPLICATION NUMBER: 08/853,524
FILING DATE: 09-MAY-1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGENT INPORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEGATION NAMES. 108.759.704
ATTONEY CARENT INFORMATION:
NAME: Marashide, Kate H
SECISTRAINON NUMBER: 29.509
REFERENCE/DOCKET NUMBER: 29.501
TELECOMMULICATION INFORMATION:
TELERAX: 202-887-1500
TELERAX: 202-887-0763
INFORMATION FOR SED ID NO: 580DUENCE CHARACTERISTSTCS:
EDENCIFI: 114 amino acids
TTPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                  122 SKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TOPOLOGY:
US-08-918-288-69
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PAPLICANT: Moyle William R.
APPLICANT: Campbell, Robert K.
APPLICANT: Campbell, Robert K.
APPLICANT: Campbell, Robert K.
TITLE OF INVENTION: Analogs of Glycoprotein Hormones Having
TITLE OF INVENTION: Altered Receptor Binding Specificity and Activity and
TITLE OF INVENTION: Hethods For Preparing and Using Same
NUMBER OF SEQUENCES: 12
ANDRESSES: ACAPTER R. Muccino
STREET: P.O. Box 1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ## I DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCTVRGLGPSYCDDPRGSGSGS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 74.9%; Score 582; DB 4; Length 234; Best Local Similarity 88.7%; Pred. No. 2e-48; Matches 110; Conservative 0; Mismatches 14; Indels Matches 100; Conservative 0; Mismatches 14; Indels
                       STREET: 2000 Pennsylvania Avenue, NW, suite 5500
STAY: Washington
STAYE: DC
                                                                                                                                          COUNTRY: USA
2.12: 2006-188
2.12: 2006-188
COMPUTER READABLE FORM:
MEDLIM TYPE: Disfecte
COMPUTER: IBM COMPATIBLE
COMPUTER: IBM COMPATIBLE
OPERATING STSTEM: DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 536

RIGH RAPLICATION DATA.
APPLICATION ONTE.: 28 AGC-1997
APPLICATION NUMBER: 08/83.524
APPLICATION NUMBER: 08/83.524
APPLICATION NUMBER: 08/83.524
APPLICATION NUMBER: 08/1997
APPLICATION NUMBER: 08/1997
ATTORNEY AGGENT INFORMATION:
NAME: MARRAMATION:
REMERNEY AGGENT NUMBER: 29/89
REPRENEY CACCET NUMBER: 29/89
REPRENEY CACCET NUMBER: 29/89
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 234 amino acida TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: Innear HOUSOLGS THREAT HOUSE TYPE: protein | FRACHENT TYPE: internal US-09-282-357-24
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US-08-425-673-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
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TITLE OF INVENTION: SINGLE-CHAIN FORMS OF THE TITLE OF INVENTION: GLYCOPROTEIN HORMONE GUARTET NUMBER OF SEGURNCES: 63
CARRESPONDENCE ADDRESSS:
CARRESPONDESSES: ACRESSES: 1000 Pennsylvania Avenue, NM, suite 5500 CIT: Washington STATE: DC. COURTE: DC. COURTE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATON:
APPLICANT: BOINE, ITVING
APPLICANT: MOTE, WILLIAM R.
APPLICANT: MOTE, WILLIAM R.
TILLE OF INVERTION: SINGLE-CHAIN FORMS OF THE
TILLE OF INVERTION: GLYCOPROTEIN HORMONE QUARTET
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRICASSIFICATION DATA:
APPLICATION NUMBER: 09/282,357
APPLICATION NUMBER: 08/83,524
FILING DATE: 09-MAY-1997
APPLICATION NUMBER: 08/83,524
FILING DATE: 09-MAY-1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY AGENT HYPORALTION:
NAME: MLGSALGG, RATE H
REGISTRATION NUMBER: 29,959
REFERENCE/COCKET NUMBER: 29,959
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
TELEPHONE: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Diskette
COMPUTER: Iban Compatible
OPERATING SYSTEM: DOS
SOFTWARE: RESIGEN FOR WINDOWS VERSION 2.0
SOFTWARE: RESIGEN FOR WINDOWS VERSION 2.0
APPLICATION NUMBER: US/08/918,288
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1S-09-282-357-24
Sequence 24, Application US/09282357
Patent No. 624280
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SEQUENCE CHRACATERISTICS:
LENGTH: 234 annto acids
TYPE: annto acid
STRANDEDNESS: single
TOPOLOGI: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
US-08-918-288-24
                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141 GSAP 144
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62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR 115
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 72.2%: Score 561; DB 1; Length 114: Best Local Similarity 92.1%; Pred. NO: 9.1e-7; Maches 103; Conservative 0; Mismatches 9; Indels Matches 105; Conservative
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GENERAL INFORMATION:
GENERAL INFORMATION:
DOING:
APPLICANT:
MOULE, MILLIAM REPLICANT:
MOULE, MILLIAM GLICOROTEIN FORMS OF THE TITLE OF INFORMION: SIGNED-CHAIN FORMS OF THE TITLE OF INFORMION: SIGNED-CHAIN FORMS OF THE TITLE OF INFORMICON:
GLICORRESPONDENCES:
ADDRESSEE:
ADDRES
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FILING DATE: 18-FEB-1994
NAME: WILDSHIPE, Rate H
REGISTRATION WINGER: 29,959
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
FILING DATE: 09-4X-1997
FILING DATE: 09-4X-1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
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US-08-918-288-9
; Sequence 9, Application US/08918288
; Patent No. 6238890
                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATIO
TELLEPORE (609) 466-3407
INFORMATION FOR SED ID NO. 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 114 mainto acids
TYPE: mainto acids
ATTORNEY/AGENT INFORMATION:
NAME: Muccino, Richard R.
REGISTRATION NUMBER: 32,5
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATIC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: 11near
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ANTI-SENSE: NO
US-08-425-673-7
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APPLICATE: COMPOSED, MILIDIAN R.

TITLE OF INVERTION: Analogs of Glycoprotein Hormones Having
TITLE OF INVERTION: Analogs of Glycoprotein Grame
TITLE OF INVERTION: Hethods For Preparing and Using Same
INVERSIVE STREAM RECEIVED.

NUMBER OF SEQUENCES: A MUCLIO
STREET: P.C. DAX 1267
CITY: Princeton
STREET: New Jersey
COMPUTER: New Jersey
COMPUTER: New Jersey
COMPUTER: The PC COMPUTED:
COMPUTED: THE PC COMPUTED:
COMPUTE
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MEDIUM TIPE: Floppy disk
MEDIUM TIPE: Floppy disk
COMPUTER: 1BM PC compatible
COMPUTER: 1BM PC compatible
COMPUTER: 1BM PC compatible
COMPUTER: 1BM PC compatible
CURRENT APPLICATION DATA:
APPLICATION NUMBER: 05/08/425,673
FILING DATE:
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION SING
FILING DATE: 1B - JUN-1991
ATTORNET, AGENT INPORMATION:
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PRIOR APPLICATION NUMBER: US 07/717,151
FILING DATE: 18-JUN-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNARY AGENT INFORMATION:
NAME: MUCCIO., RICHARD R.
REGISTRATION NUMBER: 32,538
REPRENCE/COCKTE UND TELECOMONICATION INFORMATION:
TELECOMONICATION INFORMATION:
TELEPRAM: (609) 466-3407
TELEPRAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 7, Application US/08425673
Patent No. 5508261
GENERAL INFORMATION:
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Ouery Match 71.9%; Score 559; DB 4; Length 234; Best Local Smilarity 81.5%; Pred. No. 3.24-64; Indels Matches 101; Conservative 6; Mismatches 17; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 39
US-08-191-288-21
US-08-191-288-1
Sequence 21, Application US/08918288
Patent No. 62388
Sequence 21, Application US/08918288
Sequence 21, Application US/08918288
SEQUENCE OF UNIVERSITY ON SEQUENCE OF THE TITLE OF INVENTION SINGLE-CHAIN FORMS OF THE TITLE OF INVENTION GICCORFOTEIN HORMONE QUARTET NUMBER OF SEQUENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATT 20006-18898
COMPUTER READABLE FORM:
MEDIUM TYRE: Diskette
COMPUTER: IBM COMPATIBLE
COMPUTER: IBM COMPATIBLE
OPERATING SYFEXED FOR WINDOWS Version 2.0
SOFTWARE: Reside Of Windows Version 3.0
RAPLICATION WINDER: US/08/918,288
FILING OATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
PRIOR APPLICATION HOMBER: 09/282,357
PELITAN UNTE: 09/053,524
PELITAN HUMBER: 08/053,524
PELITAN DATE: 09-MAY-1899
APPLICATION HUMBER: 08/19,382
FILLIS DATE: 18-FEB-1994
APPLICATION HUMBER: 08/199,382
ATTO
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REGISFRATION NUMBER: 29,559
REFERENCE/DOCKET NUMBER: 2956
TELEDOMGNICATION INFORMATION:
TELEDRIONE: 202-887-1500
TELEFAX: 202-887-053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 234 amino acids
TYPE: amino acid
STRANDEDNESS: single
              ; FRAGMENT TYPE: internal US-09-282-357-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein FRAGHENT TYPE: internal US-08-918-288-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                single
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COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 71.9%; Score 559; DB 4; Length 234; Best Local Similarity 81.5%; Pred. No. 3.12-6.6; Indens Matches 10; Conservative 6; Mismatches 17; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 9. Application US/09282557

Sequence 9. Application US/09282557

Particle INFORMATION:
APPLICANT: BOINE; ITAING
APPLICANT: BOINE; Milliam R.
TITLE OF INVERTION: GINCOPORE.CAIN FORMS OF THE
TITLE OF INVERTION: GINCOPORE. HORMONE QUARTET
CORRESPONDENCE: 83
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FORRSTER
STREET: 2000 Pennsylvania Avenue, NM, suite 5500
CITT: Washington TITLE OF CONTROL TO CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMFORTER ELABALE FORM:
MEDIUM TYPE: DISACTE FORM:
MEDIUM TYPE: DISACTE FORM:
MEDIUM TYPE: DISACTE FORM:
MEDIUM TYPE: DISACTE
COMPUTER: THE COMPATIBLE
COMPUTER: THE COMPATIBLE
COMPUTER: DATE: CALSCISTICATION WUMBER: US/09/282,357
FILING DATE: 25 AUG-1997
FILING DATE: 25 AUG-1997
FILING DATE: 09-18AY-1997
FILING DATE: 09-18AY-1997
FILING DATE: 18-FEB-1949
FILING DATE: 18-FEB-1949
FILING DATE: 18-FEB-1949
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FEGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 29500-20050.25
FELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
TELEPHONE: 202-887-0763
LENGTH: 234 amino acids
TPEN amino acid
TPEN amino acid
TPEN acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS: ELGITH: 24 amino acids TYPE: amino acid STRANDEDNESS: single TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141 GSAP 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 SKAP 125
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62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81 DVRFESIRLPGCPRGVRVVSYAVALSCQCALCRRSTTDCTVRGLGPSYCSFGEMREGSG 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1) SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 70.7%; Score 549; DB 4; Length 237; Best Local Similarity 86.0%; Pred. No. 2.9e-45. Matches 104; Conservative 2; Mismatches 15; Indels Matches 104; Conservative 2; Mismatches 15; Indels
                                                                                                                                                                                                   APELICANT: BOLICE, ITVING
TITLE OF INVENTION: GLYCOPROTEIN HORMONE QUARTET
COURSESONDENCE ADDRESS:
ADDRESSE: MORRISON & FORRSTER
STREET: 2000 Pennsylvania Avenue, NM, sulte 5500
CITT: ABSAINGTON
START: BOLICANTON PENNSYLVANIA AVENUE, NM, SULTE 5500
COUNTRY: USA
11P: 2000 - BOLICE
CONDUTRY: USA
COUNTRY: USA
11P: 2000 - BOLICA
CONDUTRY: DISACTED
CONDUTRY: IBM COMPACIBLE
CONDUTRY: BOLICATION DATA:
APELICATION NUMBER: US/08/918,288
FILING DATE: DISACTE NO NATA:
APELICATION NUMBER: 08/199,382
RILING DATE: 18-FEB-1994
ATTORICANTON NUMBER: 08/199,382
RILING DATE: 18-FEB-1994
ATTORICANTON NUMBER: 29,959
REFERENCE/POCKET NUMBER: 29,959
REFERENCE/POCKET NUMBER: 29,959
REFERENCE/POCKET NUMBER: 29,959
REFERENCE/POCKET NUMBER: 29,959
REFERENCE: 202-887-1500
                                                                                                                                                                          Sequence 18, Application US/08918288
Patent No. 6238890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX:
INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
LENGTH: 237 amino acids
TYPE: amino acid
STANNEDMESS: single
TOPOLOCY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-918-288-18
                                                                             122 SKAP 125
                                                                                                      141 GSAP 144
                                                                                                                                                   RESULT 41
US-08-918-288-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           φ
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                                                                                 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 71.2%; Score 553; DB 4; Length 234; Best Local Similarity 85.5%; Pred. No. 1.24-6; Matches 105; Conservative 0; Hismatches 18; Indels 0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELERAX: 202 007 1300
TELERAX: 022 087-0063
INFORMATION FOR SED ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 234 amino acids
TYPE: amino acid
STRANDENESS: Single
TOPOLOGY: Linear
HOLECULE TYPE: protein
FRAMENT TYPE: internal
Matches 106; Conservative
                                                                                                                                               122 SKAP 125
                                                                                                                                                                          141 GSAP 144
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122 \$ 122

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2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Watch 70.0%; Score 544; DB 4; Length 114; Best Local Similarity 85.1%; Pred. No. 3.8e-78. Hatches 97; Conservative 6; Mismatches 11; Indels Watches 97; Conservative
                                                                  APPLICANT: BOLDE, Irving
APPLICANT: MOTLE, William R.
TITLE OF INVENTION: GIVCOPROTEIN FORMS OF THE
TITLE OF INVENTION: GIVCOPROTEIN HORMONE QUARTET
NUMBER OF SEQUENCES: 83
CORRESPONDENCE ADDRESS:
STREET: 2000 Pennsylvania Avenue, NM, suite 5500
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T: BOIME, ITVING
T: MOYLE, WILLIAM R.
INVERTION: SINGLE-CHAIN FORMS OF THE
INVERTION: GLYCOPROTEIN HORMONE QUARTET
PREDUENCES: 83
                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: TBM Compatible
COMPATION STSTEM: DOS
SOFTWARE: RealsEN for Windows Version 2.0
CURRENT APPLICATION DATE: US/08/918,288
APPLICATION NUMBER: US/08/918,288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9500-20050.25
RESULT 43
US-08-910-288-71
US-08-910-288-71
Sequence 71, Application US/08918288
Patent No. 6238890
GENERAL INFORMATION:
APPLICANT: BOINE, ITVING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
APPLICATION NUMBER: 00/853,524
FILING DATE: 09-MAY-1997
PHILING NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 71, Application US/09282357 Patent No. 6242580 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: NUNCSAHGA: KATE H
REGISTRATION WIMBER: 29.959
REFERENCE/NOCKET NUMBER: 2950
TELECOMMONICATION INFORMATION:
TELEGROUN: 202-887-150
TELEEX: 202-887-10763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 7
SEQUENCE CHARACTERISTICS:
LENGTH: 114 amino acida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                      ZIP: 20006-1888
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
US-08-918-288-71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTWTRVLQGVLPALPQVVCNYR 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Owery Match 70.7%; Score 549; DB 4; Length 237; Best Local Smilarity 86.0%; Pred. No. 2, 9-e-45, Matches 104; Conservative 2; Mismatches 15; Indels
                                         US-09-282-357-18
Sequence 18, Application US/09282357
Sequence 18, Application US/09282357
FEREIC MO. 6242580
GENERAL HYDOMATION:
APPLICANT: HOTLE WILLiam R.
TITLE OF INVENTION: SINGLE-CHAIN FORMS OF THE TITLE OF INVENTION: GLICOPROTEIN HORMONE QUARTET OORRESPONDENCES: 8
CORRESPONDENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FORENTER
STREET: 2000 Pennsylvania Avenue, NM. suite 5500
CLITT: Nashington
CLIT: Washington
COUNTRY: USA
ZIP: 20006-1888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATONNEY/AGENT INCREATION
NAME: NUTSABLIGG, KARE H
REGISTRATION UNDER: 29,959
REFERENCE/CONCET NUMBER: 29,500-20050.25
RELECOMBUNICATION INFORMATION:
TELECOMBUNICATION INFORMATION:
TELEPRONE: 202-887-150
INFORMATION FOR ENG ID NO: 18:
SEQUENCE CHARACTERISTICS:
LEMENTH: 273 mallo acid
STRANDENESS: single
TOPOLOGY: linear
HOLECULE TYPE: protein
STRANDENES: 110ear
                                                                                                                                                                                                                                                                                                                                                                                                                                  IV: 20006-1888
COMPUTER READABLE FORM:
WEDIUM TYPE: Diskette
COMPUTER: Int Compatible
OPERATING SYSTEM: DOS
SOFTWARE: RESIERE OF WINDOWS VERSION 2.0
CURRENT APPLICATION NAME: US/09/282, 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PILING DATE:
CLASSIFICATION: 536
PRIOR APPLICATION: 536
PELLING DATE:
APPLICATION NUMBER: 08/318/288
PILING DATE: 25 AGG 1997
APPLICATION NUMBER: 08/38/524
FILING DATE: 09-MAY-1997
APPLICATION NUMBER: 08/38/35/24
FILING DATE: 18-FEB-1994
                                 141 S 141
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Second 15, Application US/08918288
Second 15, Application US/08918288
Patent No. 623889
GEREAL INFORMATION
APPLICAMY: BOTHE ITVING
TITLE OF INVENTION: GINCLE-CHAIN FORMS OF THE
TITLE OF INVENTION: GINCOROTEIN HORMONE QUARTER
NUMBER OF SEQUENCES: 83
CORRESPONDENE ADDRESS:
ADDRESSEE: MORRISON & FORESTER
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
STATE: DC
       SOPTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/425,673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPTR: USA
COMPTR: USA
COMPTR: USA
COMPUTER READABLE FORM:
MEDIUM TYPE: DISABELE
COMPUTER: IBM COMPTIBLE
COMPUTER: TBM COMPTIBLE
COMPUTER: PARTICLATION
SOFTWARE: PARTICLATION
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/918,288
FILING DATE:
PRICH APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
FILING DATE: US PARTICLATION
FILING DATE: 09/14X1-1997
APPLICATION NUMBER: 08/19,382
FILING DATE: 09/14X1-1997
APPLICATION NUMBER: 08/19,382
FILING DATE: 09/14X1-1997
APPLICATION NUMBER: US/1997
APPLICATION US/1997
APPLICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 69.5%; Score 540; DB 1;
Best Local Similarity 99.0%; Pred. No. 9.5e-45;
Matches 99; Conservative 0; Mismatches 1
                                                                                                                                                                                                            CLASSIFICATION: 514
PRIOR PAPLICATION DATA:
APPLICATION NUMBER: US 07/717,151
FILING DATE: 18-JUN-1991
ATTORNEY AGENT INFORMATION:
NAME: MUCCINO, RICHARD R.
REDISTRATION NUMBER: 32,538
REFERENCE/POCKET NUMBER: UMD 1.0-004
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
MOLECULE TYPE: PER
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 46
US-08-918-288-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ANTI-SENSE:
US-08-425-673-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
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APPLICANT: Campbell, Robert K.

APPLICANT: Campbell, Robert K.

TITLE OF INVERTION: Analogs of Glycoprotein Hormones Having

TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and

TITLE OF INVERTION: Altered Receptor Binding Same

NUMBER OF ENQUENCES: 12

CORRESPONDENCE ANDORESS:

ADDRESSEE: Richard R. Muccino

STREE: New Jorsey

COUNTRY: USA

TITLE OF STREE: New Jorsey

COUNTRY: USA

COUNTRY: USA

MEDIAN TYPE: Floppy disk

COMPUTER: Floppy disk

COMPUTER: TIM PC COMPATIBLE

COMPATIBLE STREEM: PC COMP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPR.115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 DVRFESIRLPGCPRGVDPVVSFPVALSCRCGPCRRSTSDCGGPKDHPLTCDHPQ 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 70.0%; Score 544; DB 4; Length 114; Best Local Similarity 85.1%; Pred. No. 3.8e-45. Matches 97; Conservative 6; Mismatches 11; Indels
ADDRESSEE: MORRISON & FOERSTER
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CITY: Washington
                                                                                                                                                                                                                                         COUNTRY: USA

LIP: 2006-188

COMPUTER: BADABLE FORM:
WEDINA TYPE: DISKETE
COMPUTER: IN COMPALIDIE
OWNETER: IN COMPALIDIE
CURRENT APPLICATION UNVA:
FILICATION NUMBER: US/09/282,357
FILING ONNE: 25 MUG-1997
FILING DATE: 08/918,288
FILING DATE: 08/919,382
FILING DATE: 08/919,382
FILING DATE: 08/199,382
FILICATION NUMBER: 08/99,382
FILICATION NUMBER: 08/99,382
FILICATION NUMBER: 29,959
REPREMECTORY INFORMATION:
RECIFERENT INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION
TELECOMMUNICATIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 11, Application US/08425673
Patent No. 5508261
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 71: SEQUENCE CHARACTERISTICS.
LEWGTH: 114 anino acids TYPE: amino acid STRANDENESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TOPOLOGY:
US-09-282-357-71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 45
US-08-425-673-11
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Length 117; 1; Indels

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GS-06-425-673-8

GS-06-425-673-8

GS-06-425-673-8

GENERAL INFORMATION:

APPLICATION:

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                            68.0%; Score 528; DB 4; Length 237;
82.6%; Pred. No. 2.9e-43;
tive 3; Mismatches 18; Indels
TELEX:
INFORMATION FOR SED ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 237 amino acids
TYPE: amino acid
TYPE: amino acid
STRANDEDRESS: siggle
"nopology: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 82.6
Matches 100; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS
LENGTH: 114 amino ac
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: pepti
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 S 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 48
US-08-425-673-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141 S 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 47

1 Sequence 15, Application US/09282357

1 Sequence 15, Application US/09282357

PARENT NO 6242580

CERRAL INFORMATION: CONTROL OF WILLIAM APPLICANT: BOTLE, WILLIAM APPLICANT: BOTLE, WILLIAM APPLICANT: BOTLE, WILLIAM APPLICANT: BOTLE, WILLIAM CHARGES:

CORRESPONDERS DE MORRISCH GINCOROTEIN HORMONE QUARTET:
NUMBER OF ENDURESS:

ADDRESSEE: ADDRESSEE: ADDRESSEE: ADDRESSEE: MORRISCH ESSTATE:

APPLICANT OF SEQUENCES: BOTHER: CONTROL OF SEQUENCES: BOTHER: CONTROL OF SEQUENCES: BOTHER: CONTROL OF SEQUENCES: CONTROL OF S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 68.0%; Score 528; DB 4; Length 237; Best Local Similarity 82.6%; Pred. No. 2.9e-48. Matches 109; Conservative 3; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE, DOCKET NUMBER: 29,959
REFERENCE, DOCKET NUMBER: 29500-20050.25
TELECOMUNICATION INFORMATION:
TELEPHONE: 202-887-0-1500
               RECISEMENTON HUMBER: 29,959
REFERENCE/DOCKET NUMBER: 29500-20050.25
TELEPROME: 202-887.1500
TELEPROME: 202-887.1500
                                                                                                                                                                                                                                       INPORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 237 analio acids
TYPE: amino acids
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: Linear: TOPOLOGY: Linear: MOLECULE TYPE: protein : FRAGMENT TYPE: internal 105-08-918-288-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 S 122
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JS-08-425-673-8

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Sequence 23, Application US/08709925
Patent No. 5997871
Patent No. 5997871
GENERAL INFORMATION
APPLICANT: GAllo, Robert C.
APPLICANT: GAllo, Robert C.
APPLICANT: Louradd-1standart, Yanto
APPLICANT: Louradd-1standart, Yanto
APPLICANT: Louradd-1standart, Yanto
APPLICANT: Louradd-1standart, Yanto
APPLICANT: BYANTION: ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROP
NUMBER OF SEQUENCES: 26
CORRESPONDENCES: 26
CORRESPONDENCES: 26
CORRESPONDENCES: 26
CORPETE: 1155 Avenue of the Americas
CITY: New York
CORMITTE: REALAGE FORM:
ADMINISTRATION: Administration of CORPETED FORM:
CORPETED FORM:
ADMINISTRATION: ADMINISTRATION OF CORPETED FORM:
CORPETED FORM:
ADMINISTRATION OF CARCER BY
ADMINISTRATION OF CANCER BY
ADMINISTR
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1G-06-709-948-23

Sequence 23, Application US/08709948

Patent No. 5315504

GENERAL INFORMATION

GENERAL INFORMATION

APPLICANT GAllo, Robert C.

APPLICANT ELVANT LINACALISKANDAL TSANDAL

TITLE OF INVENTION: TRANSMALY AND PREVENTION OF HIV INFECTION

TITLE OF INVENTION: BY ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOT

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fenole & Edmonds LLP

STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      49 VLPALPQVYCHYRDVREESTRLPGCPRCVHPVYSYAVALSCOCALCRRSTTDGGGRGDF 108
1 | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 11| | 1
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65.5%, Score 509; DB 2; Length 98;

Best Local Similarity 98.3%; Pred. No. 7.1e.5.

Matches 92; Conservative 1; Mismatches 0; Indels

Matches 92; Conservative 1; Mismatches 0; Indels
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COMPUTER IN PROCEED AND COMPUTER IN PROCEDABLE PORD

CONTOREN IN PROCEDABLE OF SERVING SUPPRAGE THE PROCEDABLE OF SUPPRAGE THE PROCEDABLE OF SUPPRAGE THE PROCEDABLE OF SUPPRAGE THE OF SERVING SUPPRAGE THE OF SERVING SUPPRAGE THE OF SUPPRAGE THE OF SERVING SUPPRAGE THE OF SUPPRAGE THE OF SUPPRAGE THE OF SUPPRAGE SUPPRAGE THE OF SUPPRAGE S
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TYPE: amino acid
TOPOLOGY: linear
WOLECULE TYPE: peptide
US-08-709-925-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
ZIP: 10036-2711
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: New York
STATE: New York
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
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Sequence 23, Application US/08709924

Sequence 21, Application US/08709924

GENERAL INFORMATION:

APPLICANT: Gallo, Robert C.

APPLICANT: Bryont, Joseph

TITLE OF INVENTION: WEIMOS OF PROMOTING HUMAN CHORIONIC

STREET: LISS ADDERNES:

CORRESPONDENCE ADDERS:

CORRESPONDENCE ADDERS:

APPLICANT: Bryont, USAM

STREET: 1155 APPLICANT: Bridge DERIVATIVES OF HUMAN CHORIONIC

CORRESPONDENCE ADDERS:

APPLICANT: Bryont, USAM

STREET: 1155 APPLICANT: Bridge DERIVATIVES OF HUMAN CHORIONIC

CONFERS: Deanie & Edmonds

STREET: 1155 APPLICANT

STREET: 1155 APPLICANT

STREET: 1155 APPLICANT

CONFERS: OSAM

STREET: Pennie & Edmonds

STREET: New YORK

STREET: DO3G-2711

CONFERS: DEALIER READER

COMPUTER: READER FOWER

COMPUTER: PREADER FOWER

COMPUTER: DASAMABLE FOWER

COMPUTER FOWER

COMPUTER: DASAMABLE FOWER

COMPUTER F
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                                                                                                                            Query Match 66.8%; Score 519; DB 1; Length 114; Best Local Similarity 95.0%; Pred. No. 9.38-49; Anches 4; Indels 1 Hasmatches 4; Indels 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCDSDSTDC 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
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US-08-709-925-23
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NAME: Murashige, Kate H
REGISTRATION NUMBER: 295
REFERENCE/DOCKET WUBER: 295
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-687-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 7(
INFORMATION FOR SEQ ID NO: 7(
SEQUENCE CHARACTERISTICS:
LENGTH: 93 amino acids
ITPE: amino acid
STRANDENESS: single
"TRODOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 202-887-0763
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 VLPALPQVVCNYRDVRFESIRLPGCPRGLNPVVSXAVALSCQCALCRRSTTDCGGPKDHP 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 65.5%; Score 509; DB 4; Length 98; Best Local Similarity 98.9%; Pred. No. 7.1e-62; Indels Matches 92; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 52
Sequence 70, Application US/08918289
Sequence 70, Application US/08918289
Setent No. 6238890
Septemation of Canada
Septemation of Canada
Septemation of Canada
SINGLE-CHAIN FORMS OF THE TITLE OF INVENTIONS CHOOSENSINGLES 83
CORRESORDENCE NOBRESSES
SUBSESSES HORRISON & FORESTER
STREE TO CONCRETE 12000 Peninsylvania Avenue, NW, suite 5500
STATE: DC
COUNTRY: USA
STATE: DC
COUNTRY: USA
STATE: DC
COUNTRY: REALBALE FORM: MS
SOFTHAM CONTRY: DISACTE
COMPUTER REALBALE FORM: MS
SOFTHAM SYSTEM: DOS
CURRENT ASSISTED FOR MINIOUS VERION 2.0
CURRENT ASSISTED FOR WINDOWS VERION 2.0
CURRENT APPLICATION DATA:
REPLIANCE NUMBER: US/08/918,288
MEDIUM TYPE: Floppy disk
COMPUTE: ININ PC COMPAILLE
CORPUTE: ININ PC COMPAILLE
CORPUTARE: PC-DOS/NS-DOS
CONTRARE: Petentin Release #1.0, Version #1.30
CORRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/709,948
FILING DATE: 09-SEP-1996
CLASSIFICATION: AS-L9196
CLASSIFICATION: AS-L816
CRESIFICATION: AS-L816
CRESIFICATION: AS-L816
CRESIFICATION NUMBER: 16,872
REFERENCE/OCCKET NUMBER: 16,872
REFERENCE/OCCKET NUMBER: 8769-016
TELEPRAX: (212) 790-9090
TELEPRAX: (212) 860-9741/8864
TELERY: 66141 PENNIE
INDOMENTE CHARACTERISTICS:
LENGTH: 98 annio acids
TYPE: amino acids
TYPE: amino acids
TYPE: peptide
US-08-709-948-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109 LTCDDPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 LTCDDPRFQDSSSXAPPPSLPSPSRLPGPSDT 93
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APPLICATION NUMBER: 09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
PRILING DATE:
FILING DATE: 09-MAY-1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGERT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Murashige, Kate H
REGISTRATION NUMBER: 29,959
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1 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 60
                                                                                                                                                                                                                                                                                                                                                                                                            2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                               Ouery Match 65.3N; Score 507; DB 4; Length 93; Best Local Similarity 100.0N, Pred. No. 1e-41. Heads Matches 93; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence 70, Application US/09282157
Patent No. 6242580
CREMEAL INFORMATION:
APPLICANT: BOIME, TIVING
APPLICANT: MOVIE, William R.
TITLE OF INVENTION: SINGLE-CRAIN FORMS OF THE
TITLE OF INVENTION: GLYCOPROTEIN HORMORE QUARTET
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER
STREET: 2000 Pennsylvania Avenue, NW, SUITE
CITY: Washington
STREE: CONTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: DC
COUNTRY: USA
CONFUTER: USA
COMPUTER READABLE FORM:
MEDIUM TYPE: D1sActte
COMPUTER: LEM COMPALIDE
CONFUTER: LEM COMPALIDE
CONFUTER: LEM COMPALIDE
CONFUTER: LEM COMPALIDE
CONFUTER: USA
SOFTWARE: PSASISO FOR WINDOWS VERSION 2.0
CURRENT APPLICATION DATA:
RPLICATION NUMBER: US/09/282,357
FILING DATE: 25 AUG-1997
FILING DATE: 25 AUG-1997
FILING DATE: 09-MAY-1997
FILING DATE: 18-FEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 29
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
TELEFAX: 202-887-0763
                                                                                                               : INPOGRATION FOR SEQ ID NO: 7
SEQUENCE CHRACTERISTICS:
LENGTH: 93 anino acids
TYPE: amino acids
STRANDEDNESS: single
TOPOLOGY: linear
US-08-918-288-70
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29500-20050.25

US-09-282-357-70

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Ouery Match 62.8%; Score 488; DB 2; L
Best Local Similarity 100.0%; Pred. No. 6.4e-40;
Matches 88; Conservative 0; Mismatches 0;
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US-09-158-565-2
Sequence 2, Application US/09158565
; Patent No. 6139839
. GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Alan J. Howarth
RECISTANTON NUMBER: 36,553
REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION TELEFAX: (801)566-0750
INFORMATION POR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 aming acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Odell, William D.
APPLICANT: Griffin, Jeanine T.
APPLICANT: Grover, Sanjeev
APPLICANT: Caticha, Omar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
US-08-327-362-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
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TITLE OF INVERTION: Analogs of Glycoprotein Hormones Having TITLE OF INVERTION: Analogs of Glycoprotein Hormones Having TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and TITLE OF INVERTION: Altered Receptor Binding Specificity and Activity and ITLE OF INVERTION: Altered Receptor Binding Same
CORRESPONDENTE ALCHARG R. Muccino
STREET: New JOSSES: Activity Same
CONFRESSES: Activity R. Muccino
STREET: New JOSSES
CONFITE: New JOSSES
CONFITER: New JOSSES
COMPUTER: READABLE FORM:
MEDIUM TITLE: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
FILLING DATE: MADEL DATE:
FILLING 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
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Query Match 65.3%; Score 507; DB 4; Length 93; Best Local Similarity 100.0%; Pred. No. 1e-41; Matches 93; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 DVRFESIRLPGCPRGVNPVVSYAVALSCKCGKCDTDYSDC 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                CLASSIFICATION: 514
PRIOR PRELICATION DATA:
APPLICATION NUMBER: 05 07/717,151
FILING DATE: 18-JUN-1991
ATTORNEY AGENT THYOCHAPTION:
NAME: MUCCINO, RICHARD R.
REGISTRATION NUMBER: 32,538
REPREMENCE/DOCKET NUMBER: UND 1.0-004
TELECOMMONICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       UND 1.0-00
                                                                                                                                                                                                                                                                                                                                                                               Sequence 12, Application US/08425673 Patent No. 5508261 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 117 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: peptide HYPOTHETICAL: NO ANTI-SENSE: NO 18-425-677-7
                                                                                                                                                                                                                                                                                                                         RESULT 54
US-08-425-673-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ANTI-SENSE:
US-08-425-673-12
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36,553

Length 88;

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RESULT 59
US-08-709-948-24
Squence 24, Application US/08709948
; Patent No. 6319504
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Sequence 24, Application US/08/09924

Patent No. 5968513

GENERAL INFORMATION:
APPLICAMT: Gallo, Robert C.
APPLICAMT: Gallo, Robert C.
APPLICAMT: Gallo, Robert C.
APPLICAMT: Gallo, Robert C.
APPLICAMT: Lunard-18adada, Yanto
TITLE OF INVERTION: USING DERIVATIVES OF HUMAN CHORIONIC GONADOTROPIN
WINDHER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS: Lamonds
STREET 155 Avenue of the Americas
STREET 155 Avenue of the Americas
STREET 155 Avenue of the Americas
STREET 103A

ZITT: New York
SCHWITER 121 Avenue of the Americas
STREET 103A

ZITT: New York
SCHWITER 121 Avenue of the Americas
STREET 103A

ZITT: New York
SCHWITER 121 Avenue of the Americas
STREET 103A

ZITT: New York
SCHWITER 121 BORDET

MEDIUM TYPE: Ploppy disk
FELEMATION 1048

SOFTWARE: Patentin Release #1.0, Version #1.30

ATTORNEY/ACRY TROBAMTION:
REPERRYCEATON NUMBER: US/08/709,924

TELEPRIN: Gall PENNIE

REPERRYCEATON NUMBER: 18,872

REPUBERRYCEATON NUMBER: 18,872

REPUBERRYCEATON NUMBER: 18,872

REPUBERRYCEATON NUMBER: 
APPLICANT: Carrell, Douglas T.
APPLICANT: Woods, II, Marion L.
ATTLE OF INVESTION: Control of Infectious Microorganisms by Modulation of
TITLE OF INVESTION: Control of Infectious Microorganisms by Modulation of
TITLE OF INVESTION: Control of Gonadotropin-Related Protein Activity
TITLE OF INVESTION: Control of Gonadotropin-Related Protein Activity
CHERRAL FORDICATION MUMBER: US 08/327,362
GURRENT FILING DARE: 1994-10-21
EMARLER PILING DARE: 1994-10-21
SOUTHMER OF SEO ID MOS: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  53 LPQVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCD 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 LPQVVCNYRDVRFESIRLPGCPRGVPVVSYAVALSCQCALCRRSTTGCGFKDHPLTCD 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Owery Match 62.8%; Score 488; DB 4; Length 88; Best Local Smilarity 100.0%; Pred. No. 6.4e-40; Matches 9; Indels Matches 88; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ....OGY: linear
; MOLECULE TYPE: peptide
US-08-709-924-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENCTH: 88
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-158-565-2
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Sequence 24. Application US/0870925
; Sequence 24. Application US/0870925
; Patent No. 5957871
; APPLICANT SETVATU. ASSERBLY
APPLICANT SETVATU. ASSERBLY
TITLE OF INVENTION: FREATHENT AND PREVENTION OF CANCER BY
TITLE OF INVENTION: ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROP
CORRESPONDENCE: 26
CORRESPONDENCE ADORES:
CORRESPONDENCE & Edmonds LLP
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
COUNTRY: USA
                                                                             59 NYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQD 118
                                            0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 58.8%; Score 457; DB 2; Length 88; Best Local Smilarity 99.8%; Pred. No. 5.8e-37; Matches 92; Conservative 1; Mismatches 0; Indels
                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READALE FORM:
MEDIUM TYER: FORPPY GISK
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTHMASE: PALENTER RELEASE #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILLING DATE: 09-SED-1996
CLASSIFICATION.
58.8%; Score 457; DB 2; 98.8%; Pred. No. 5.8e-37; ive 1; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY AGENT INFORMATION:
NAME: MISTORY, 2. Le8116
REGISTRATION NUMBER: 18 872
REPREMENCYCOKET NUMBER: 8769-0
TELEBONN: (212) 869-914/8864
FELER: 66141 PENNIE
INFORMATION CARRIENTES
ERNORMIN ON SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENCH: 80 maino acids
TYPE: maino acid
TYPE: maino acid
TYPE: maino acid
TYPE: maino acid
TYPE: MOLECULE TYPE: peptide
                                                                                                                                                                 119 SSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 SSSSKAPPPSLPSPSRLPGPSDT 83
Query Match
Best Local Similarity 98.8%
Matches 82; Conservative
                                                                                                                                                                                                                                                                          RESULT 58
US-08-709-925-24
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62 DVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 ELRFASIRLPGCPPGVDPWVSFPVALSCHGPCQIKTTDGGVFRDQPLACAP---QASSS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 61
10S-08-096-915-14
15 Sequence 14, Application US/08086915
15 Retent No. 5444167
15 REMEMALI NEORANTION
15 APPLICANT: Pettersson, Kim SI
17TIC DO INVERTION: Variant Luteinizing Hormone Encoding DNA
18 NUMBER OF SEQUENCES: 17
17 CORRESPONDENCE ADDRESS:
18 STREET: Addoct, Mestriani, Schaumberg & Schill
18 STREET: Addoct, Mestriani, Schaumberg & Schill
19 STREET: Addoct, Mestriani, Schaumberg & Schill
19 STREET: Addoct, Mestriani, Schaumberg & Schill
10 STREET: 0.05.00.
10 STREET: 0.05.00.
11 STREET: 1140 Connecticut Avenue, N.M., Suite 250
12 STREET: 0.05.00.
13 STREET: 0.05.00.
14 STREET: 0.05.00.
15 STREET: 0.05.00.
16 STREET: 0.05.00.
17 STREET: 0.05.00.
18 STREET: 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 57.6%; Score 447.5; DB 1; Length 149; Best Local Similarity 60.7%; Pred No. 85e-16; 85e-76; Marches 81; Conservative 15; Mismatches 35; Indels 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYEE: RIOPPY disk
MEDIUM TYEE: RIOPPY disk
COMPUTER: IBM FO compatible
OURPRAINE SYSTEM: FO. DOS/MS-DOS
SOFTAMRE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION PARTA
APPLICATION WINDER: US/08/086,915
FILING DATE: U7-JUL-1993
CLASSIFFORTION: 53
ATTORNET/AGENT INFORMATION:
OPERATING SISTEM: PC-DOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/425,673
                                                                                                                                PAPLICATION
FILING DATE
CLASSPICATION 514
PROR APPLICATION DATA:
PRICATION NAMES: 05 07/11/151
APPLICATION NUMBER: 05 07/11/151
ATOMNEY/AGENT RICHARD 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     122 SKAPP--PSLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     118 SKDPPSQPLTSTTPTPGAS 137
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                                                                      APPLICANT: BYART, ADSEPT C.
APPLICANT: BYART A.
APPLICANT: LURAGEL ISRANDAR, VANCO
APPLICANT: LURAGEL ISRANDAR, VANCO
APPLICANT: LURAGEL ISRANDAR, AND PREVENTION OF HIV INFECTION
TITLE OF INVENTION: TREATMENT AND PREVENTION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROG
NUMBER OF SEQUENCES: 26
CARRESPONDERCE ADDRESS:
ADDRESSEE: Pennle & Edmonds LLP
CITT: New YOR C.
STREET: New YOR
STREET: New YOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: World William R.

APPLICANT: Campbell, Robert K.

TITLE COMPENDING: Analogs of Glycoprotein Hormones Having
TITLE OF INVENTION: Altered Receptor Binding Specificity and Activity and
TITLE OF INVENTION: Methods For Preparing and Using Same
NUMBER OF SEQUENCES. 12
CAMPESPONEES 12
CAMPESPONES: 12
CAMPESPONES: 12
CAMPESPONES: Richard R. Muccino
STREET: Princeton
STREET: Revieton
STREET: Revieton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59 NYRDVRRESIRLPGCPRGVNPVVSTAVALSCQCALCRRSTTDCGGPRDHPLTCDDPRROD 118
1 NYRDVRESIRLPGCPRGLWRYSYNALLSCQCALCRRSTTDCGGPRDHPLTCDDPRROD 6
1 NYRDVRESIRLPGCPRGLWYSYNALLSCQCALCRRSTTDCGGPRDFLTCDDPRROD 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           58.8%; Score 457; DB 4; Length 88; 98.8%; Pred. No. 5.8e-37; tive 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: WEW TOTK
COUNTRY: USA
LIF: 10036-2711
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTAME: Patent: Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION 19.7A:
APPLICATION 19.7A:
ALINE DATE: 09-1996
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 5, Application US/08425673 & Patent No. 5508261 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELERYN (2121-869-9741/864
TELEX: 611 PENNIE
INFORMATION FOR SEG. ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 88 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: Amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                119 SSSSKAPPPSLPSPSRLPGPSDT 141
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COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 98.88
Matches 82; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; MOLECULE TYPE: peptide
US-08-709-948-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: U
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3 CELTNITIAVEKEGGGFCITINTIMCAGYCYTROLVYKD--PARPKIQKTCTFKELVYET 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match 29.3%; Score 228; DB 4; Length 104; Best Local Similarity 43.6%; Pred. No. 5.2e-15. Hetches 41; Conservative 17; Hismatches 32; Indels Matches 41; Conservative 17; Hismatches 32; Indels
                                                                                                                                                                 Query Match 29.3%; Score 228; DB 4; Length 104; Best Local Similarity 43.6%, Pred. No. 5.2e-15, Matches 41; Conservative 17; Mismatches 32; Indels Matches
                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:

CASSITICATION S36
PRIOR APPLICATION NATA
APPLICATION NUMBER: 009/18, 28
FILING DATE: 25 AUG-1997
APPLICATION NUMBER: 009/85, 524
FILING DATE: 09-44X-1997
APPLICATION NUMBER: 001/19, 382
FILING DATE: 18-FEB-1994
ATTORNEY/ACENT INFORMATION:
NAME: MATCASHIGE, RATE H
RELIGERATION NUMBER: 29, 595
REFERENCE/OCKET WUMBER: 29, 595
TELECOMMUNICATION: NUMBER: 29, 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
WENDING TIPE: DISACTED
CONFUTER: IBM COMPAILIDE
OFFRATING STEPRE: DOS
OFFRATION NUMBER: US/09/282,357
                                                                                                                                                                                                                                                                                                                                                  68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                          61 VRVPGCAHHADSLYTYPVATQCHCGKCDSDSTDC 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEG ID NO: 74:
SEQUENCE CHRACETERISTICS:
LEWITH: 104 amino acids
TTRE: amino acid
STANDEDNESS: single
TOPOLOGY: Linear
     SEQUENCE CHARACTERISTICS:
; LENGTH: 104 annino acids
; TYPE: annino acid
; SYRANDENNESS: single
; TOPOLGGY: linear
US-08-918-288-74
                                                                                                                                                                                                                                                                                                                                                  ò
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 29.5%; Score 229; DB 1; Length 46; Best Local Similarity 100.0%; Pred. No. 1.76-15; Matches 41; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                         COATION: 30
OTHER INFORMATION: /note- 'The aspargine at position
OTHER INFORMATION: 30 is linked to an oligosaccharide.
US-08-086-915-14
                                                                                                                                                                                                                                      realusts:

MARE/RET: Modified-site

LOCATION: 13

LOCATION: 13

COTHER INFORMATION: 13 is linked to an oligosaccharide.

FRANTHE:

NAME/RET: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 62

05-08-018-218-74

Sequence 74, Application US/08918288

Setent No. 6238890

GENERAL HEPRANTION:
APPLICANT: MOLIE, WILLIAM R.

TITLE OF HYENTION: GINCOPPOREIN HORMONE OUARTET

TITLE OF HYENTION: GINCOPPOREIN HORMONE OUARTET

SOURESSEE: ADDRESS:
STREET: 2000 Pennsylvania Avenue, NM, suite 5500

COTTY: Mashington

CONTRESS: DATE: DC

COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 70005-18898
COMPUTER REALDALE FORM:
WEDIGN TIPE: N DISKRICE
COMPUTER: INCOMPALIBLE
COMPUTER: INCOMPALIBLE
COMPUTER: INCOMPALIBLE
COMPUTER: INCOMPALIBLE
COMPUTER: INCOMPALIBLE
COMPUTER: INCOMPALIBLE
APPLICATION WHERE: US/08/918,248
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
APPLICATION WINDER: 08/953,524
FILING DATE: 09-MAY-1997
APPLICATION WINDER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGENT INFORMATION:
NAME: MILESPILGE, KALE H
REGISTRATION WINDER: 29,959
REPRENCE/DOCKET WINDER: 29,959
TELECOMMULATON INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
INFORMATION FOR SEQ IO. 14: SEQUENCE CHARACTERSTATCS:
LENGTH: A f anino acids
TYPE: anino acids
TYPE: anino acid
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
ORGANISM: Home sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 74:
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4; Gaps

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Ouery Match 29.3% Score 228; DB 4; Length 108; Best Local Similarity 43:64, Pred. Mo. 5.4e-15; Matches 41; Conservative 17; Mismatches 32; Indels
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GG-08-316-288-72
GG-08-316-288-72
SGUENCE 72, Application US/08918288
SPACEN LNO. 623889
GENERAL INFORMATION:
APPLICANT: WOLLE, ILVING
APPLICANT: WOLLE, ILVING
TITLE OF INVENTION: SINGLE-CHAIN FORMS OF THE
TITLE OF INVENTION: SINGLE-CHAIN FORMS OF THE
CORRESPONDENCE ADDRESS:
ADDRESSEE: WORRISON & FOEKSTER
STREET: 2000 Pennsylvania Avenue, NW, sulte 5500
Sequence 73, Application US/09282357
Patent No. 6242580
Patent No. 6242580
CARREAL INFORMATION:
CAPLICART: MOYIE, William R.
TITLE OF INVENTION: GLICOPROTEIN HORMONE QUARTET TITLE OF INVENTION: GLICOPROTEIN HORMONE QUARTET NUMBER OF ESQUENCES: 83
CORRESPONDENCE NO.
CORRESPEE: MORRISON & FORESTER STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CITY: Washington CITY: Washington COUNTRY: USA
COUNTRY: USA
COUNTRY: DESCRIPTION: DESCRIPTION: DISACTE COUNTRY: THE COMPATION TO STREET CONCURS. THE CONCURS. THE COMPATION STREET COMPATION STREET COMPATION STREET CONCURS. PARTICATION NUMBER: US/09/282.357
FILING DATE: 35 AUG-1997
FILING DATE: 35 AUG-1997
FILING DATE: 18-FEB-1994
ATTORIENT WHEBER: 09-194 18-EB-1994
ATTORIENT WHEBER: 091991
FILING DATE: HIGHERATION: NUMBER: 091992
FILING DATE: HIGHERATION: NUMBER: US/09/282.382
FILING DATE: HIGHERATION: NUMBER: US/09/282.382
FILING DATE: HIGHERATION: NUMBER: US/09/282.382
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Murashige, Kate H
REGISTRATION UNMER: 29,959
REFERENCE/DOCKET NUMBER: 29500-20050.25
TELECOMMULICATION INFORMATION:
TELEPRONE: 202-887-1500
TELEPRONE: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 73: SEQUENCE CHARACTERISTICS: LENGTH: 108 amino acids TYPE: amino acid STRANDEDMESS: siggle TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TOPOLOGY:
US-09-282-357-73
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                           10 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQV--VCNYRDVRFES 67
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                                                                                                                                                                                                                                               RESULT 64
US-08-918-13
US-08-918-13
SEQUENCE 73. Application US/08918288
PATENT W. 6. 213890.
GENERAL INFORMATION:
APPLICANT: DOUTE, WILLIAGE
TITLE OF INVENTION: SINCLE.
TITLE OF INVENTION: SINCLE.
CORRESPONDENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: 83
CORRESPONDENCES: B3
CORRESPO
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COMPUTER READABLE PORM:
MEDINY TYPE: Diskette
COMPUTER: IRM Competible
COMPUTER: IRM Competible
COMPUTER: RESERVE DOS
SOFTWARE: PRESERVE OF
APPLICATION WHERE: US/08/918,288
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIPCATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
APPLICATION NUMBER: 09/282,357
FILING DATE: 09-MA-11997
APPLICATION NUMBER: 09/19/382
FILING DATE: 18-FEB-1994
APPRICATION NUMBER: 29,959
APPLICATION NUMBER: 29,959
REFERENCE/OCCATI NUMBER: 29,959
TELECOMMUNICATION NUMBER: 20,959
                                                                                                                                                             68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
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                                                                                                                                                                                                           61 VRVPGCAHHADSLYTYPVATQCHCGKCDSDSTDC 94
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TOPOLOGY:
US-08-918-288-73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 65
US-09-282-357-73
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Washington

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Sequence 6, Application US/08425673
Patent No. 550202
GENERAL INFORMATION:
APPLICANT: MOYLe William R.
APPLICANT: MOYLe William R.
APPLICANT: MOYLE MINISTRING R.
APPLICANT: Analogs of dycoprotein Hormones Having
TITLE OF INVENTION: Altered Receptor Binding Specificity and Activity and
WINGER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 CELTNITIAVEKEGGGFCITINTTWGAGYCYTRDLVYKD--PARPKIGKTCTFKELYFET 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQV - - VCNYRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 29.31. Score 228; DB 4; Length 111; Best Local Stallarity 41.64, Pred. Mo. 5.6e-15; Indels Matches 41; Conservative 17; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READMALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBN PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FLILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                           NAME: Murashige, Kate H
BEGISTRATION UNDERS: 29,959
REFERENCE/DOCKET NUMBER: 29500-20050.25
FELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1500
TELEPHONE: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 VRVPGCAHHADSLYTYPVATQCHCGKCDSDSTDC 94
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REGISTRATION NUMBER: 32,538
REFERENCE/DOCKET NUMBER: UND 1.0-004
TELECOMMUNICATION INFORMATION:
                     FILING DATE: 25 AUG-1997
APPLICATION UNDERS: 08/853,524
FILING DATE: 09-MAX-1997
APPLICATION UNDERS: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/11/151
FILING DATE: 18-UN-1991
ATYONREY AGENT INFORMATION:
08/918,288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSE: Richard R. Muccino
STREET: P.O. Box 1267
CITY: Princeton
                                                                                                                                                                                                                                                                                                                                                                                                      TELEX:
INFORMATION FOR SEQ ID NO: 72:
SEQUENCE CHARACTERISTICS:
LENGTH: 111 amino acida
TIPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: New Jersey
COUNTRY: USA
ZIP: 08551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TOPOLOGY:
US-09-282-357-72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 29.3%; Score 228; DB 4; Length 111; Best Local Similarity 43.6%; Pred. No. 5.6e-15; Matches 41; Conservative 17; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 67

18-09-281-357-72

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18-09-281
                                   MEDITH TYPE: Diskette
COMPUTER: I'M Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DAY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NARE: MURABLIGO EXTER H
RECISTRATION NUMBER: 29,959
RETERRACE/POCKET NUMBER: 29500-20050.25
TELECHANICATION NUMBER: 29500-20050.25
TELEFAX: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08/853,524
PELLING DATE: 09-MAY-1997
PELLING DATE: 09-MAY-1997
PELLING DATE: 18-FEB-1994
TORNEX/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                     TOPLICATION DATA: 09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 72: SEQUENCE CHARACYPERSTICS: LENGTH: 111 amino acids TYPE: amino acid STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TOPOLOGY:
US-08-918-288-72
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21 CELTNITIAIEKEECRFCISINTTWCAGYCYTRDLVYKD--PARPKIQKTCTFKELVYET 78
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                                                                                                                                                                                                                                                                                                                                                                                                  10 CRPINATLAVEREGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQV--VCNYRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDBPLTCDDPRFQDSSSSKAP 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 28.51, Score 222; DB 4; Length 223; Best Local Smilarity 37.34, Pred. No. 4.6-H. Matches 44; Conservative 19; Mismatches 51; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 28.6%; Score 222; DB 4; Length 223; Best Local Smilarity 37.3%; Pred. No. 4.6e-14; Matches 44; Conservative 19; Mismatches 51; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION STATES OF THE TITLE OF UNEWARTON: GLYCOPROTEIN HORMONE QUARTET TITLE OF UNEWARTON: GLYCOPROTEIN HORMONE QUARTET NUMBER OF SEQUENCES: 83 CORRESPONDENCES: 83 CORRESPONDENCES: 83 CORRESPONDENCES: 83 CORRESPONDENCES: 84 CORRESPONDENCES: 85 CORRESPONDES: 85 CORRESPONDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 536
PRIOR APPLICATION DAY.
PRIOR APPLICATION DAY.
PRIOR APPLICATION NUMBER: 08/918,288
FILING DAYE: 25 AUG-1997
APPLICATION NUMBER: 08/199,382
FILING DAYE: 18-FEB-1997
APPLICATION NUMBER: 08/199,382
FILING DAYE: 18-FEB-1994
ATTORNEY AGENT NUPORALION:
NAME: NUMBER: 29-959
REFERENCE/COCKET NUMBER: 29-959
REFERENCE/COCKET NUMBER: 29-959
TELECOMMULICATION INFORMATION:
TELEBAX: 202-887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 70
209-282-357-27
: Sequence 27, Application US/09282357
: Patent No. 6242580
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SEQUENCE CHARACTERISTICS:
LENGTH: 223 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-09-282-357-27
; FRAGMENT TYPE: internal US-08-918-288-27
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2 CIPEYMTIERRECACLTINITICAGTC--MFBDIRGKLEPPXALSOVCTVEDFT 59
2 CIPEYMTIERRECACLTINITICAGTC--MFBDIRGKLEPPXALSOVCTVEDFT 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 28.8%; Score 224; DB 1; Length 112; Best Local Similarity 46.9%, Pred. No. 1.4e-14. Matches 45; Conservative 11; Mismatches 34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Section 27. Application US/08918288
Patent No. 6.33890
GENERAL INFORMATION: ITVING
PAPLICANT WORLE, WILLIAM R.
TILLE OF INVENTION: GLYCOROTEIN HORMONE QUARTET
MONRESSEE OF SEQUENCES: 83
CONRESSPONDENCES: 83
CONRESSPONDENCES: 83
CONRESSPONDENCES: 84
CONRESSPONDENCES: 85
CONRESSPEE: MASALLE FORM: 85
CONRESSPEE: M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IEM COMPALIDLE
OPERATING SYSTEM: DOS
OPERATING SYSTEM: DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/918,288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60 RTVEIPQCPLHVAPYFSYPVALSCRCGRCDTDYSDC 95
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INPORATION FOR SEQ ID NO: 27.
SEQUENCE CHARACTERISTICS:
LENGTH: 223 amino acids
TYPE: amino acid
STRANDENESS: single
                                                                                                  INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 112 amino acid
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         single
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MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                          HYPOTHETICAL: NO STANTING STAN
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21 CELTNITIAIEKEECRFCISINTIWCAGYCYTRDLVYKD--PARPKIGKTCTFKELVYET 78

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10 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQV - VCNTRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSS 122
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 73
US-09-282-357-12
Sequence 12. Application US/09282357
Sequence 12. Application US/09282357
Sequence 12. Application US/09282357
Sequence 12. Application US/09282357
Sequence 12. Application Sequence 12. Title OF INVENTION: SINCLE-CHAIN FORMS OF THE TITLE OF INVENTION: GLYCOPROFILIN HORMONE QUARTET NUMBER OF EXCHANGES:
CORRESPONDENCE ADDRESS:
ADDRESSE: ADDRESSE: ADDRESSE:
STREET: 2000 Peninsylvania Avenue, NM, suite 5500
CTITLE OF INVENTION: MASHINGTON CONTRACTION CONTRACT
                                                                COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: THE COMPACTIBLE
OPERATING SYSTEM: DOS
SOFTWARE: FRSIESE OF Windows Version 2.0
CURRENT APPLICATION NATION: (SY/09/282,357
APPLICATION NUMBER: US/09/282,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29,959
ER: 29500-20050.25
                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/918, 288 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/282,357
PLITING NATE: 08/853,524
APPLICATION NUMBER: 08/853,524
APPLICATION NUMBER: 08/199,382
APPLICATION NUMBER: 18-FEB: 1994
APPLICATION NUMBER: 18-FEB: 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Murashige Kete H
REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 2950
REFERENCE/TOWN RIFORMATION:
TELECHMUNE: 202-887-0763
TELERAX: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHRACKTERISTICS:
LENGTH: 219 amino acids
TYPE: amino acid
STRANDENESS: single
TOPOLOGY: linear
NOLECULE TYPE: protein
FRACKMENT TYPE: internal
US-08-918-288-12
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COUNTRY: USA
ZIP: DOGO-1888
COMPUTER REMOMBLE PORK:
REDIUM TYPE: Diskette
COMPATINE TREATER: TREATER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
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68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLTCDDPRFQDSSSSKAP 125
                                                                                      Sequence 12, Application US/08086915
Patent No. 5444ION
REMEAL INFORMATION
REMEAL INFORMATION
FAPLICANT: Petterson, Kim SI
TITLE OF INVENTION: Variant Lutelnizing Hormone Encoding DNA
FOURESE OF SEQUENCES: 17
CORRESPONDER ADDRESS:
ADDRESSEN: Adduct, Mastriant, Schaumberg & Schill
STREET: 1140 Connecticut Avenue, N.W., Suite 250
CITY: Washington
COUNTRY: D.C.
COUNTRY: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oubry Match 28.4%; Score 221; DB 1; Length 46; Best Local Similarity 95.1%; Pred. No. 9.6e-15; Indels Matches 39; Conservative 1; Mismatches 11: Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jos-08-918-288-12
Sequence 12, Application US/08918288
Sequence 12, Application US/08918288
Sequence 12, Application US/08918288
Sequence 12, Application US/08918288
Sequence 12, Application Sales 12, Application On US 12, Application On US 12, Application On US 12, Application On US 14, Application On US 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIF: GUUSS
COMPUTER READABLE FORM:
WEDIUM TYPE: FISAPPP disk
CONFUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTM 42
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
NAME: REPERTATION:
NAME: KLADOCAL, ROBAIL J.
REGISTRATION NUMBER: 25,401
REGISTRATION NUMBER: 25,401
REPERTATION NUMBER: 15973005
TELECOMMUNICATION INFORMATION:
TELERAK: 202-466-2006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/086,915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 07-JU
                                                                                                                                                                                                                                                                          RESULT 71
US-08-086-915-12
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10 CRPINATLAVERESCPYCITYNTICAGYCPTMTRVLOGYLPALPOY--VCNYRDVRFES 67
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Opery Match 27.9%; Score 217; DB 4; Length 222; Best Local Similarity 37.3%; Pred. No. 1.4e-13; Marches 44; Conservative 19; Mismatches 47; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 75

US-09-282-387-30

Sequence 10, Application US/09282357

Patent No. 6245801

SEGUENT INFORMATION:

APPLICANT: BOINE, Irving

APPLICANT: BOINE, Irving

APPLICANT: MOUTE, WILLIAM CHAIN FORMS OF THE

TITLE OF INVENTION: GIVCOPROFEIN HORMONE QUARTET

NUMBER OF SEQUENCES: 83

CORRESSEDE: HORRISON & FORENTER

STREET: 2000 Pennsylvania Avenue, NM, suite 5500

STATY: MASHINGTON

STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CONTRY: USA

21F: L. 2006.1888

21F: 2006.1888

COMPUTER READABLE FORM:
MEDIUM TYPE: Disfecte
COMPUTER: IRM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSED for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/282,357
FILING DATE:
                   NAME: Wurshijge, Kate H
REGISTRATION NUMBER: 39,959
REFERRNEAPOCKET NUMBER: 29500-20050,25
RELECOMUNICATION INFORMATION:
TELECOMUNICATION 11000
TELEFAX: 202-887-0763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Murashige, Kate H
REGISTRATION WUMBER: 29,959
REFERENCE/DOCKET WUMBER: 29500-20050.25
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION 1536
PRIOR APPLICATION DATA
APPLICATION DATA:
18 FLING DATE: 25 AUG-1997
FILING DATE: 05 AUG-1997
APPLICATION NUMBER: 08/195,524
FILING DATE: 09-MAX-1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/ACEPT INFORMATION:
NAME: WATASHIGE KALE H
REGISTRATION NUMBER: 29,959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: 30: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                             INPORANTION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
TYPE: anino acid
TYPE: anino acid
TYPE: anino acid
TYPE: anino acid
TYPE: Infeat
HOLECULE TYPE: procein
US-08-288-30
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21 CELVATTAIRKEGCRCISIATTWCAGYCTREDLYYO--PARPICIATTREECRCISIATTWCAGYCTREDLYYO--PARPICIATTREECRCISIATTWCAGYCTREDLYYO--PARPICIATTREECRCISIATTWCAGYCTREDLYY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 239 18; Score 218; DB 4; Length 229 Best Local Smilarity 36:58; Pred. No. 1.1e-13; Matches 42; Conservative 21; Hismatches 48; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 30, Application US/08918288

Patent No. 623889

Patent No. 623880

GRERAL INFORMATION

APPLICAMT: BOUNE ITVING

TITLE OF INVENTION: GLYCOROFEIN HORMOR OF THE

TITLE OF INVENTION: GLYCOROFEIN HORMOR OUAFFET

NUMBER OF SEQUENCES: 83

CORRESPONDENCE ADDRESS:

ADDRESSEE: MORRISON & FORBSTER

STREET: 2000 Pennsylvania Avenue, NW, suite 5500

STATE: DC

STATE: DC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPOTER: IBM Competible
COMPOTER: IBM Competible
OPERATING SYERH: DOS
SOFTWARE: PASSISED CO Windows Version 2.0
SOFTWARE: PASSISED CO WINDOWS
FULLIANTOW NUMBER: US/08/918,288
FULLIAG DATE:
PRICE APPLICATION
APPLICATION
APPLICATION BURER: 09/282,357
FILING DATE:
CLASSIFICATION: 536

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08,918,288
FILICATION NUMBER: 08,918,288
FILICATION NUMBER: 08,693,524
FILICATION NUMBER: 08,493,324
APPLICATION NUMBER: 08,493,324
APPLICATION NUMBER: 08,199,382
APPLICATION NUMBER: 18,FEB-19199,382
APPLICATION NUMBER: 29,599
REFERENCE/ACCET NUMBER: 29,599
REFERENCE/ACCET NUMBER: 29,599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 08/953,524
FILING DATE: 09-MAY-1997
APPLICATION NUMBER: 08/199,382
FILING DATE: 18-FEB-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
TELERAX: 202-887-1500
TELERAX: 202-887-1500
TELERAX: 202-887-1500
TELERAX: 202-887-1500
SEQUENCE CHARACTERISTICS:
LENGTH: 202 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acid
TYPE: amino acids
TYPE: amin
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ZIP: 20006-1886
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 74
US-08-918-288-30
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Sequence 4, Application US/08425673
Sequence 4, Application US/08425673
Sequence 4, Application US/08425673
Sequence 4, Application Sequence 1
APPLICANT: Moyle, William R.
APPLICANT: Campbell, Robert K.
TITLE OF INVENTION: Analogs of Glycoprotein Hormones Having
TITLE OF INVENTION: Altered Receptor Binding Specificity and Activity and
TITLE OF INVENTION: Methods For Preparing and Using Same
WINNER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10 CRPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQV - - VCNYRDVRFES 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 27.5%; Score 214; DB 1; Length 111; Best Local Similarity 40.4%; Pred. No. 1.2e-13; Matches 39; Conservative 19; Mismatches 33; Indels Matches 18; Conservative 19; Mismatches 33; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IIP: 08551

COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IIBM POC compatible
OPPRATING SYSTEM: PC-DOS/MS-DOS
SOFTMAKE: Datentin Release #1.0, Version #1.25
CURRENT APPLICATION NOMBER: US/08/425,673
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 VRVPGCAHHADSLYTYPVALQCHCGKCDSDSTDC 94
    APPLICATION NUMBER: US/08/425,673
FILING DATE:
CLASSIFICATION: 514
PRICA APPLICATION S14
APPLICATION NUMBER: US 07/11/,151
FILIG DATE:
APPLICATION NUMBER: US 07/11/,151
ATTORNET/ACEPT INFORMATION:
NAME: MUCCATO, RICCAR OF
REFERENCE/DOCKET NUMBER: UPD 1.0-004
TELECOMMUTATION INFORMATION:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIPICATION: 214

PRUGR APPLICATION UNBER: US 07/717,151

FLIME DATE: 18 -0.W1-991

ATTORNEY/AGENT INFOGRACTION:
NAME: WOCCION INFORMATION:
REGISTRATION UNBER: 27,538

REFERENCE/DACKET UNBER: UD 1.0-004

TELECOMENICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Richard R. Muccino
STREET: P. O. Box 1267
CTTY: Princeton
STATE: New Jersey
COUTRY: USA
ZIP: 08551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (609) 466-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HYPOTHETICAL: NO
HYPOTHETICAL: NO
ANTI-SENSE: NO
US-08-425-673-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 78
US-08-425-673-4
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APPLICART: Campbell, Robert A.

TITLE OF INVENTION: Altered Receptor Binding Specificity and Activity and TITLE OF INVENTION: Altered Receptor Binding Specificity and Activity and TITLE OF INVENTION: Altered Receptor Binding Space

TITLE OF INVENTION: Altered Receptor Binding Space

TITLE OF INVENTION: Altered Receptor Binding Space

CORRESPONDENCE And Activity and Activity and STRESPONDENCE AND ACTIVITY ACTIVITY ACTIVITY ACTIVITY ACTIVITY RELADINGED ACTIVITY ACT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Onery Match 27.9%; Score 217; DB 4; Length 222; Best Local Similarity 37.3%; Pred. No. 1.4e-13. Matches 44; Conservative 19; Mismatches 47; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Owery Match 27.7%; Score 215; DB 6; Length 45; Best Local Similarity 95.0%; Pred. No. 3.5e+14; Matches 38; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SADISATAL
SPECIAL SASSISSY
APPLICATE SATISTY VIRENDER K.:BODNER, JOHN B.
TILLE OF INVENTION: HGC PEPTIDES FOR USE IN ANTIBODY
PORIFICATION PROCEDURES
CURRENT APPLICATION DATA:
FILLING DATE: 30-JAM-1991
PRICHA DATE: 30-JAM-1991
PRICHA DATE: 30-JAM-1991
PRICHA DATE: 10-JUL-1989
APPLICATION NUMBER: 221,687
SEQ ID NO.1:
SEQ ID NO.1:
SEQ ID NO.1:
SASSISSY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGPKDHPLTCDDPRFQDSSSSKAPPPASPSPSRLPGPSDT 40
LENGTH: 222 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                            TOPOLOGY: linear
WOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-09-282-357-30
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RESULT 81
5177133-3
5177133-3
FAREIL NO. 5177193
RAPPLICANT: BOTOLE INVING; MATZUK,MARTIN M.
TITLE OF INVERTION: MODIFIED FORMS OF REPRODUCTIVE HORMONES
UNMER OF SEQUENCES: 35
CURRENT APPLICATION NUMBER: US/07/512,254
FILING DATE: 01-JUN-1990
PRIOR APPLICATION NUMBER: 313,646
FILING DATE: 21-FEB-1989
SEQ ID NO.3:
LENGTH: 131
5177193-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match 26.6%; Score 207; DB 1; Length 46; Best Local Similarity 90.2%; Pred. No. 2.1s-13; Indels Matches 77; Conservative 1; Mismatches 3; Indels
                                                                       6 SREPLRPWCHPINAILAVEKEGCPVCITVNTTICAGYCPTM 46
                                   2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTM 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTM 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6 SREPLRPWCHPINAILAVEKEGCPVCITVNTTICAGYCPTM 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: KOROACIA,
REGISTRATION NUMBER: 25.401
REFERENCE/DOCKET NUMBER: 1587;
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION 10.2-467-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELERAM: 202-466-2006
TELERAM: 202-466-2006
TRODAMITON POR SED IN NO: 13
SEQUENCE CHARACTERISTICS:
LENGTH: 46 amino acids
TYPE: amino acid
TYPE: amino acid
MARCHETICAL: NO
HYPOTHETICAL: NO
ORGANISM: Homo saplens
US-08-086-915-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
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                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 79
US-08-086-915-11
Sequence 11, Application US/08086915
Sequence 11, Application US/08086915
Settle No. 544467
STEREAL INVENTION: Warlant Luteinizing Hormone Encoding DNA TITLE OF INVENTION: Variant Luteinizing Hormone Encoding DNA CORRESPONDENCE ADDRESS: 17
CORRESPONDENCE ADDRESS: 17
CORRESPONDENCE ADDRESS: 17
STREET: 1140 Connecticut Avenue, N.W., Suite 250
STREET: Washington
STREET: STREET: 100 Connecticut Avenue, N.W., Suite 250
STREET: Mashington
                                                                                                                                                                                                                                                                                                       Duery Match 27.5%; Score 214; DB 1; Length 111; Best Local Similarity 40.4%; Pred. No. 1.2e-13; Indels Matches 39; Conservative 19; Mismatches 33; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 26.6%; Score 207; DB 1; Length 46; Best Local Smillarity 90.2%; Pred. No. 2.1e-13; Matches 37; Conservative 1; Mismatches 3; Indels
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OTHER INFORMATION: /note- 'The asparagine at position CHER INFORMATION: 30 is linked to an oligosaccharide US-08-086-915-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: 10.5.

STATE: 10.5.

CONDURTY: U.S.A.

CONFOURE: RADABLE FORM:
MUDIDIM TYPE: RIDAPY disk
COMPUTER: RADABLE FORM:
COMPUTER: INH FC COMPALIALE
COMPUTER: INH FC COMPALIALE
COMPUTER: THE COMPALIANE
COMPATION STATEM: PC-DOS/MS-DOS
SOFTWARE: PATCHIN Release #1.0, Version #1.25
CLASSIFICATION WHERE: US/08/086,915
CLASSIFICATION WHERE: US/08/086,915
CLASSIFICATION: UNDER 10.30
RELEBRANCE CONCET UNMERS: 15,401
RELEBRANCE CONCET UNMERS: 15,401
RELEBRANCE TO NOT NUMBER: 15,401
RELEBRANCE TO SEE TO NOT 11: A
SEQUENCE CHARACTERISTICS:
LENGTH: 46 main of acids
FELERAL AND ACIDS AND ACIDS
FELERAL SOFTWARE TO SEE TO NOT 11: A
FURTHER AND ACIDS AND ACIDS
FELERAL SOFTWARE TO SEE TO NOT 11: A
FURTHER AND ACIDS AND ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68 IRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 VRVPGCAHHADSLYTYPVALQCHCGKCDSDSTDC 94
NAME/REY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo saplens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
TOPOLOGY: linear
MOLEGULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
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0; Gaps

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NUMBER OF INVENTION: Variant Luteinizing Hormone Encoding DNA NUMBER OF SEQUENCES: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 23.0%; Score 179; DB 1; Length 41; Best Local Similarity 75.6%; Pred. No. 8.7e-11; Matches 31; Conservative 4; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 13
OTHER INFORMATION: /note- "The asparagine at position of OTHER INFORMATION: 13 is linked to an oligosaccharide. US-08-08-515-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Penals & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
COUNTRY: USA
ZIP: 10036-2711
COMPUTER: READABLE FORM:
WEDIUM TYPE: Floppy disk
COMPUTER: TBM PC COMPALISI
SUFFRIET: PREADABLE PORM:
COMPUTER: PREADABLE FORM:
REDIUM TYPE: PREADE FORM:
COMPUTER: PREADE FORM:
COMPUTER: PREADE FORM:
COMPUTER: PREADE FORM:
COMPUTER: PREADE FORM:
APPLICATION NUMBER: US/08/709,924
                                                                CORRESPONDENCE ADDRESS:
ADDRESSE: Adduct, Mastriani, Schaumberg & Schill
STREET: 1140 Connecticut Avenue, N.W., Suite 250
CITY: Washington
STATE: D.C.
CONTRET: D.C.
ZIP: Z0036.
                                                                                                                                                                                                                                                                          ZIP: 20036
COMPUTE READALE PORM:
COMPUTER READALE PORM:
COMPUTER: IBM PC COMPAILBLG
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTM 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/086,915
FILING DATE: 07-JUL-1993
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5873005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TORREY AGENT INFORMATION:
NAME: Kubovcik, Ronald J.
NAGESTRANTON UNUBER: 25,401
REFERENCE/DOCKET UNUBER: 158
LIECOMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 41 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFHONE: 202
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                                                                                                                                                                              21 CELTNITIAIEKEBCRFCISINTTCWCZGYCYTRDLVYKD--PARPKIQKTCTFKELVYE 78
                                                                                                                                10 CRPINATLAVEREGCPVCITVNTTI-CAGYCPTMTRVLQGVLPALPQV---VCNYRDVRFE 66
                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 82
US-08-915-17
Sequence 11, Application US/08086915
Fatter No. 544167
GENERAL INFORMATION
TITLE OF INVENTION: Variant Luteinizing Hormone Encoding DNA
TITLE OF INVENTION: Variant Luteinizing Hormone Encoding DNA
NUMBER OF SEQUENCES: 11,
CORRESPONDENCE ADDRESS:
COUNTER: 1140 Connecticut Avenue, N.H., Suite 250
STATE: D. STATE: 0.5.A.
COUNTER: 0.5.A.
TITLE OF INVENTION OF A STATE: 0.5.A.
TOWNERS: 0.5.A.
TOWNERS: 0.5.A.
TOWNERS: 0.5.A.
THE OF THE O
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Ouery Match 24.8%; Score 193; DB 6; Length 131; Best Local Smilarity 39.6%; Pred. No. 1.5-11; Matches 38; Conservative 18; Mismatches 34; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 24.6%; Score 191; DB 1; Length 41; Best Local Smilarity 82.9%; Pred. No. 6.2e-12; Matches 34; Conservative 2; Wismatches 5; Indels Matches 44; Conservative 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: /note- "The apparagine at position of OTHER INFORMATION: 13 is linked to an oligosaccharide. US-08-086-915-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

REDIGN TYPE: PLOPPY disk
COMPUTER: TEM PC COMPATABLE
COMPUTER: TEM PC COMPATABLE
COMPUTER: PACABLIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/086,915
FILING DATE: 07-JUL-1993
ATTORNEY/AGENT INFORMATION:
NAME: KADAVCIA, ROMAI J
REGISTRATION WUMBER: 25.401
RECISTRATION WUMBER: 25.401
RECISTRATION WUMBER: 25.401
RELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 SKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTM 42
                                                                                                                                                                                                                                                                                                                        79 TVRVPGCAHHADSLYTYPVATQCHCGKCDSDSTCDC 114
                                                                                                                                                                                                                                                                      67 SIRLPGCPRGVNPVVSYAVALSCQCALC-RRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 8
05-00-086-915-15
is sequence 15, Application US/08086915
is Pacent No. 544.167
is GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Pettersson, Kim SI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEMENT 202-467-6300
TRELEMENT 202-465-2006
INPORMATION FOR SED ID NO: 1
SEQUENCE CHRANCTENSITICS:
LENGTH: 41 amino acids
TYPE: amino acids
TYPE: almost AUCHOLUE TYPE: protein
HYPOTHERICAL: NO
PRATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: Modifled-site
LOCATION: 13
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GENERAL INFORMATION:

APPLICANT: Gallo, Robert C.
APPLICANT: Gallo, Robert C.
APPLICANT: Gallo, Parat, Joseph
APPLICANT: Unnardi-1skandar, Yanto
TITLE OF INVENTION: TREATHENT AND PREVENTION OF BIV INFECTION
TITLE OF INVENTION: BY ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC CONADOT
TOTAL OF HUMBERS:
ADDRESSES: 26
CORRESSONDENCE ADDRESS:
ADDRESSES: Pennie & Edmonda LLP
STREET: 1155 Arenue of the Americas
CITLY: New York
COUNTRY: USA
ZIP: 10056-2711
COMPUTER READABLE FOUR:
HEDIUM TYPE: Flopy disk
COMPUTER: BLOPY disk
HEDIUM TYPE: PLOPY disk
COMPUTER: PROPABLE FOUR
OPERATIOS SYSTEM: 05-005/48
FLICATION NOMBER: 05-005/48
FLICATION NOMBER: 05-005/405/40
ATTORNAMES/ADDRESSES 110, Version #1.30
CLASSIFICATION: 474
ATTORNAMES/ADDRESSES 18 870
CLASSIFICATION: 14 4
ATTORNAMES/ADDRESSES 18 870
TELEPRAN: C1212 969-9741/8864
TELEPRAN: C1212 969-9741/8864
TELEPRAN: C1212 990-9090
TELEPRAN: C1212 990-9904
TELEPRAN: C12
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CORRESPONDENCE ADDRESS: 17

CORRESPONDENCE ADDRESS: Adduct, Mastriani, Schaumberg & Schill

STREF: 1140 Connecticut Avenue, N.W., Suite 250

CITE: Mashington

STATE: D.C.,

COUNTRY: U.S.A.

219: 20036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 22.5%; Score 175; DE Best Local Similarity 100.0%; Pred. No. 1.5 Matches 32; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         110 TCDDPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                              1 TCDDPRFQDSSSSRAPPPSLPSPSRLPGPSDT 32
                                                                                                                                                                                                                                                                                     RESULT 86
US-08-709-948-25
Sequence 25, Application US/08709948
Patent No. 6319504
GENERAL INPORMATION:
APPLICANT: GAILO, Robert C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 87
18-08-086-915-16
Sequence 16, Application US/08086915
Patent No. 5444167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT GAILO, Robert C.
APPLICANT STAIR, Joseph
APPLICANT BYAIC, JOSEPH
APPLICANT BYAIC, JOSEPH
APPLICANT BYAICAL STAIR AND APPLICANT TITLE OF WINDERTON TREATHERM AND PREVENTION OF CANCER BY
TITLE OF INVERTION. ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROPIN WUMBER OF SEQUENCES: 26
CORRESPONDED: POPRESS:
CARRESPONDED: POPRESS:
CARRESPERSE: Pennel & Educads LLP
STREET 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 37;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
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COUNTRY: USA

CONFORT: USA

CLASSIFICATION NUMBER: USA

CLASSIFICATION UNMER: USA

CLASSIFICATION SID

ATTOREY/ARET INPORMATION:

NAME: MISTOCK, S. Lesiie

RECISPRATION WUMBER: 18 872

RECISPRATION WUMBER: 18 872

TELECOMMUNICATION HUMBER: 18 872

TELECOMMUNICATION HUMBER: USA

CONFORT: USA

CONFORT

CONFORT: USA

CONFORT

CONFO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 22.5%; Score 175; DB 2; Best Local Similarity 100.0%; Pred. No. 1.99-10; Marches 3.2; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               110 TCDDPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 TCDDPREQDSSSSRAPPSLPSPSRLPGPSDT 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 85
38-08-708-925-25
Sequence 25, Application US/08709925
Patent No. 5997871
FILING DATE: 09-SEP-1996
CLASSIFICATION: 514
TORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 37 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; MOLECULE TYPE: peptide US-08-709-924-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-709-925-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
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APPLICANT: Russell, J.R.
APPLICANT: TWA, V.T.
TILLE OF INVENTION: Genetically Engineered Enzymes And Their
TILLE OF INVENTION: Genetically Engineered Enzymes And Their
TILLE OF INVENTION: Conjugates For Diagnostic Assays
THERET ADDRESS: 34 Conjugates For Diagnostic Assays
CONFESSONDENCES: 34 Conjugates For Diagnostic Assays
CONFESSONDENCES: 34 Conjugates
TABET: One Abbott Park Road
CITY: Abbott Park Road
CONFITE: USA
CONFITE: USA
CONFITE: USA
CONFITE: ISA PC Compatible
OPERATING STEER: PC-POS/AS DOS
CONFITE: ISA PC Compatible
OPERATING STEER: PC-POS/AS DOS
CONFITE: USA PC-CONFITE
OFFICE: PC-POS/AS DOS
CONFITE: USA PC-CONFITE
OFFICE: PC-POS/AS DOS
CURRET POD DATE:
TILNG ONTE:
TILNG 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/100,708
FILMS DATE: 3017, 29, 1993
ATTORNEY/AGBNT INFORMATION:
RAME: WOOF, WEAN RELIES TREATION NUMBER: 33,561
REFERENCE/POCKER NUMBER: 33,561
TELECOMONICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   113 DPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 DPRFQDSSSSKAPPPSLDSPSRLPGPSDT 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 29, Application PC/TUS9402539; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX:
INDORANTION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 39 amino acid residues
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION
TELEPHONE: (708) 938-3517
TELEFAX: (708) 938-2623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: unknown
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
GRGANISM:
US-08-657-392-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 90
PCT-US94-02539-29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match
19.39; Score 155; DB 6; Length 34;
Best Local Similarity 100.04; Pred. No. 1.4e-08;
Matches 29; Conservative 0; Misdatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JADJAL14

PRELECT NO. 5451577

APPLICATE: SARIA, VIERDER K.; BODNER, JOHN B.

TILLE OF INVENTION: HCG PEPTIDES FOR USE IN ANTIBODY

PURIFICATION PROCEDURES: 14

NUMBER OF SEQUENCES: 14

APPLICATION NUMBER: US/OF/047,893

FILING DATE: 30-JAN-1991

PRIOR APPLICATION DATA:

PRIOR APPLICATION NUMBER: 375,731

FILING DATE: 10-JUL-1988

APPLICATION NUMBER: 221,687

SEQ ID NO:4:

SEQ ID NO:4:

SEQ ID NO:4:

SEQ ID NO:4:
RESULT 89
US-08-657-392-29
US-08-657-392-29
Sequence 29, Application US/08657392
Patent No. 5843634
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: TYPE: TYPE: TOPOLOGY: 1 Inear

MOLECULE TYPE: protein
US-08-086-915-16
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1; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Omery Match 17.44; Score 135.5; DB 6; Length 36; Best Local Similarity 93.1%; Pred. No. 1.1e-06; Marches 7; Conservative 0; Mismatches 1; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 17.4; Score 15.5; DB 6; Length 41; Best Local Similarity 93.1%; Pred. No. 1.2e-06; Matches 27; Conservative 9; Mismatches 1; Indels
                                                                                                                                                                                                                                                                      Length 39;
                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 94
543127-9
; ALTION TO SASSIST

TILL OF INVENTION: GENTLY, VIRENDER K.; BODNER, JOHN B.
TILL OF INVENTION: HGC PEPTIDES FOR USE IN ANYIBODY
PRINTICATION PROCEDURES

MUNBER OF SEQUENCES: 14

CURRENT APPLICATION NUMBER: US/07/647,693

FILING DATE: 30-3AN-1991

RRICH APPLICATION NUMBER: 25,731

PRILING DATE: 10-ULL-1989

APPLICATION NUMBER: 221.687

FILING DATE: 10-ULL-1989

APPLICATION NUMBER: 221.687

FILING DATE: 20-ULL-1989

APPLICATION NUMBER: 221.687

FILING DATE: 20-ULL-1989
                                                                                                                                                                                                                                                                      Query Match 19.9%; .Score 155; DB 6; 1
Best Local Similarity 100.0%; Pred. No. 1.6e-08;
Matches 29; Conservative 0; Mismatches 0;
PURIFICATION PROCEDURES

NUMBER OF SEQUENCESS: 14

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/647,893

FILING DATE: 30-JAN-1991

PRIOR APPLICATION DATA:

APPLICATION WEBER: 375,731

FILING DATE: 10-JUL-1989

APPLICATION NUMBER: 221,687

FILING DATE: 20-JUL-1989

SEQ ID NO:12:
                                                                                                                                                                                                                                                                                                                                            LENGTH: 36
5451527-6
                                                                                                                                                                                                              , LENGTH: 39
5451527-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match 19.09; Score 155; DB 5; Length 39; Best Local Smilarity 100.00, Fred. No. 1.6e-08; Matches 29; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 39;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 91
5451527
RAFELOL NO. 5451527
RAFILCART: SKRIN, VIRENDER K.; BODNER, JOHN B.
TITLE OF INVENTION: HCG PEPTIDES FOR USE IN ANTIBODY
WHERE OF SEQUENCES: 14
CURRENT APPLICATION DATH:
RILOR PEPLICATION DATH:
RILING DATE: 30-JAN-1991
FILING DATE: 30-JAN-1991
FILING DATE: 10-JUL-1998
FILING DATE: 20-JUL-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: SARIN, VIRENDER K.; BODNER, JOHN B. TITLE OF INVENTION: HCG PEPTIDES FOR USE IN ANTIBODY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 19.9%; Score 155; DB 6; 3
Best Local Similarity 100.0%; Pred. No. 1.6e-08;
Matches 29; Conservative 0; Mismatches 0;
                                                       COMGUTER READABLE PORM:
WEDINH TIPE: Floppy disk
COMPUTER: IEM PC COMPALIBLE
COMPUTER: SEN PC-DOS/MS-DOS
SOFTWARE: SOLEC
URRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/02539
CLASSIFICATION:
                                                                                                                                                                                                                           ATTORNEY/GENERALION:
NAME: WOOD, WEAR KING
REGISTRATION NUMBER: 33,561
REFRENCE/DOCKET NUMBER: 5224 PC.01
TELECOMMUNICATION INPORMATION:
TELEFRAME: (708) 938-3317
TELEFRAME: (708) 938-3623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     113 DPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                                                                                                                                                              TELEX:
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LEMCTH: 39 amino acid residues
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDENESS:
TOPOLOGY: UNKNOWN
MOLECULE TYPE: Peptide
ORIGINAL SOURCE:
ORGANISM:
PCT-US94-02539-29
     STATE: Illinois
COUNTRY: USA
ZIP: 60064-3500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO:8:
LENGTH: 39
5451527-8
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1; Gaps
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16.41; Score 127.5; DB 6; Length 41;
Best Local Similarity 79.34; Pred. No. 7.2e-06.
Watches 23; Conservative 4; Mismatches 1; Indels 1

                                                                                                                                                                                                                                                Query Match
16.4%; Score 127.5; DB 6; Length 36; Best Local Similarity 79.3%; Pred. No. 6.2e-06; Metches 73; Conservative 4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
16.48; Score 127.5; DB 6; Length 41;
Best Local Similarity 79.38; Pred. No. 7.2e-06.
Matches 23; Conservative 4; Mismatches 1; Indels
Matches 23; Conservative 4; Mismatches 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 98
545157-13
PREGIOT 98
FALLICATION SASISZT

APPLICATION SACING
PREMIURS
PRINTED TITLE OF INVENTION: 4GG PEPTIDES FOR GSE IN ANTIBODY
PRINTED TOWN PROCEDURES

WHERE OF STOURNESS 14
CURRENT APPLICATION DATA:
PILLING DATE: 30-JAN-1991
PRICHATION NUMBER: 125,731
PRICHATION NUMBER: 125,731
PRICHATION NUMBER: 221,687
APPLICATION NUMBER: 221,687
SEC ID NO.13:
SEC ID NO.13:
SASISZY-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 113 DPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
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| PRPLICATION NUMBER: 375,731
| FILING DATE: 10-JUL-1999
| APPLICATION NUMBER: 20-316.75
| SEQ ID NO:3: 120-316.75
| SATISTY: 36
| 5411527-5
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Best Local Similarity 93.1%; Pred. #D, 7.1.2-06;
Matches 77; Conservative 0; Hismatches 1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match 17.41; Score 135.5; DB 6; Length 41; Best Local Similarity 93.11; Pred. No. 1.2e-06. Makethes 27; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                SATISATION SASISTA

PRELICANT: SARIA, VIRENDER K.; BODNER, JOHN B.

TILLE OF INVENTION: HCG PEPTIDES FOR USE IN ANTIBODY PREPRIORES

WHERE OF SEQUENCES: 14

CURRENT APPLICATION DATA:

PRILIME DATE: 30-JAN-1991

PRILIME DATE: 30-JAN-1991

APPLICATION NUMBER: 135,731

FILING DATE: 10-JUL-1999

APPLICATION NUMBER: 221,687

SEQ ID NO.10:

SEQ ID NO.10:

SEQ ID NO.10:

SEQ ID NO.10:

SEG ID NO.10:

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545157-11
FACENT SARIN, VIRENDER K.; BODNER, JOHN B.
TITLE OF INVENTION: HGG PEPTIDES FOR USE IN ANTIBODY
FOURFFICATION PROCEDURES:
NUMBER OF SEQUENCES: 14
CREMENT APPLICATION DATA:
RAPLICATION DATA:
PRIOR PAPLICATION DATA:
FILING DATE: 30-JAM-1991
FILING DATE: 10-JUL-1989
FILING DATE: 21-67-101-1989
FILING DATE: 221-687
FILING DATE: 220-JUL-1989
FILING DATE: 20-JUL-1989
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5451527-5
1451527-5
19ELGLAM: SAFIN, VIRENDER K.; BODNER, JOHN B.
TITLE OF INVENTION: HCG PEPTIDES FOR USE IN ANTIBODY
PROCEDURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        113 DPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: 0S/07/647,893
FLING DATE: 30.7AN-191
PRIOR APPLICATION DATA:
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;
LENGTH: 41
5451527-11
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Gaps

APPLICATION NUMBER: US/08/419,519 FILING DATE:

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RESULT 102
Sequence 1, Application US/08918288
Sequence 1, Application US/08918288
Sequence 1, Application US/08918288
GENERAL INFORMATION:
APPLICANT: BOTHE ITTIE OF INVENTION: SINGLE-CIAIN FORMS OF THE ITTIE OF INVENTION SINGLE-CIAIN HORMONE OURRET STREET: 2000 Pennsylvania Avenue, NW, suite 5500 STREET: 2000 Pennsylvania Avenue, NW, suite 5500 STREET: 2000 Pennsylvania Avenue, NW, suite 5500 STREET: 2000 CHORTER: Diskette COMPUTER: IBM Compatible OFERNING SYSTEM: DOS SOFTANER: FRSISTE OF WINDOWS VERSION 2.0
CURRENT APPLICATION NUMBER: US/08/918,288
FILIAM DATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 15.4%; Score 120;
Best Local Similarity 100.0%; Pred. No. 2
Matches 23; Conservative 0; Mismatche
                                                              PROGRAMMENT S14
PROGRAMMENT S14
PROGRAMMENT S14
PROGRAMMENT S14
PRICEATION NOMBER: US 08/049,869
FILING DATE: 20-APR-1393
ATTORNEY AGENT INFORMATION:
NAME: WIRABLECE, KATE H.
REGISTRATION NUMBER: 29-959
REPRESENCE, POCKET NUMBER: 29-959
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELENTE: 90-402
INFORMATION POR SEG ID NO: 13:
SEQUENCE CHARACTERISTICS:
LEWATH: 28 amino acids
TTRE: maino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
RRIGH APPLICATION DATA:
APPLICATION UNMER: 09/282,357
FILLG DATE: 09-4AV-1997
FILLG DATE: 09-4AV-1997
FILLG DATE: 18-FEB-1994
APPLICATION NUMBER: 08/199,382
FILLG DATE: 18-FEB-1994
APPORNEY/ACENT INPOMATION:
NAME: MUMBER: 29,59
REFERENCE/OFERT NUMBER: 29,59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 202-887-0763
TELEX:
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TOPOLOGY:
US-08-419-519-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
APPLICANT: DOING.
TITLE OF INVENTION: MODIFIED PROTEIN AND PEPTIDE
TITLE OF INVENTION: MODIFIED PROTEIN AND PEPTIDE
TITLE OF INVENTION: PRARMACEUTICALS
CORRESPONDENCE ADDRESS:
AUDRESSED: MORRISON & PORRSTRR
STREET: 2000 Pennsylvania Ave. N.W.
CITY: Washington, D.C.
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READMALE FORM:
MEDIUM TYPE: Floeppy disk
COMPUTER: IBM PC Compatible
OPERATIG SYSTEM: PC-DOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 15.4%; Score 120; D
Best Local Similarity 100.0%; Pred. No. 2.
Matches 23; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . Sequence 13, Application US/08419519 . Patent No. 5792460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-485-692-13
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Ouery Match 15.44; Score 120; DB 4; Length 28 Best Local Smilarity 100.01; Pred. No. 2.4e-05; Matches 21; Conservative 0; Mismarches 0; Indels
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US-08.239-26.3
US-08.239-26.3
Sequence 3, Application US/08239256
Fatent No. 558324.5
SEREAL INFORMATION
APPLICANT: BOTHE INFORMATION
APPLICANT: KEENE, JEFFRET L.
TITLE OF INVENTION: CTP EXTENDED FORM OF LH
NUMBER OF SEQUENCES: 24
CORRESPONDER ADDRESSE: WORLISON & FORESTER
STREET: 2000 Pennsylvania Ave. N.W.
CITY: Washington, D.C.
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER: INH PC COMPATIBLE
SOFTWARE: PATENTIAN RELABER PATENTIA
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ATTORNET/AGENT TRORAMATION:
NAME: WURASHIGE, KATE H.
RECISTRATION WIMBER: 29,959
REFERENCE/DOCKET WUMBER: 29,959
TELECHOMINICATION INFORMATION:
TELECHOMINICATION INFORMATION:
TELECHOWE: (202) 887-050
TELEERAX: (202) 887-053
TELEERAX: (202) 887-053
TELEERAX: (202) 887-053
TELEERAX: (202) 887-053
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FILING DATE: 06-MAY-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TION RELIEF DATE: 1999-08-30
RIOR APPLICATION NUMBER: 60/147,452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3, Application US/09604871
o. 6340742
INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          119 SSSSKAPPPSLPSPSRLPGPSDT 141
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                                                                                                                                                                                                                         GENERAL INFORMATION:
PRILIANT: Burg, Josef
APPLICANT: Higer, Berder
APPLICANT: JOSeL, Hans-Perer
TITLE OF INVENTION: ENTHROPO)
FILE REPERENCE: 1098 HORDFOVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E CHARACTERISTICS:
H: 75 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT CRGANISM: HOMO Sapiens US-09-604-871-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
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                                                                                                                                                                                                                                                                                                                  Length 28;
                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 103
19-282-337-1
19-582-337-1
19-584-00-282-337-1
19-584-00-282-337-1
19-584-00-282-337-1
19-585-00-282-357-1
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19-58-00-282-1
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                                                                                                                                                                                                                                                                                                       Ouery Match 15.4%; Score 120; DB 4;
Best Local Similarity 100.0%; Pred. No. 2.4e-05;
Matches 23; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFCATION: 536
PRIOR APPLICATION DATA
APPLICATION DATA
APPLICATION DATA
APPLICATION UNBER: 08/918,288
FILING DATE: 25 AdC-1997
APPLICATION WUBBER: 08/199,382
FILING DATE: 18-EB-1994
ATOWREYACENT IRROBANTION:
NAME: MACREYACENT IRROBANTION:
NAME: MALSSINGER: 29,959
REFERENCE/DOCKET WURBER: 29,950-20050,25
TELECOMMUNICATION INPRER: 29,950
TELECOMMUNICATION INPRER: 29,950
TELECOMMUNICATION INPRER: 20,950
TELECOMMUNICATION INPRER: 20,950
TELECOMMUNICATION INPRER: 20,950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SED ID NO: 1:
SEDURNCE CHARACTERISTICS:
LENGTH: 28 amino acids
TIPE: amino acid
STRANDENESS: single
OS-09-283-597-1.
SEQUENCE CHARACTERISTICS:
LENGTH: 28 maino acids
TYPE: amino acid
STRANDENESS: single
TOPOLOGY: linear
US-08-918-288-1
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Length 28;

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RESULT 108

US-09-305-639-2

Sequence 2. Application US/09305639

Patent No. 6200778

SEQUENCE 1. HURORANJAN

APPLICANT: Treco, Douglas A.

APPLICANT: Heartlein, Michael W.

APPLICANT: HEACH C. 7025040 (1000)

CURRENT APPLICANT: GENOMIC SEQUENCES FOR PROTEIN PRODUCTION AND DELIVERY

FILE REPERENCE 17336-01601

CURRENT APPLICANTON NUMBER: US/09/305,639

CURRENT APPLICANTON NUMBER: 60-05

EARLER APLICANTON NUMBER: 60-05

SARVIER FILING DATE: 1996-05-07

NUMBER OF SEQ ID NOS: 7

SEQUENCE: FELLING SECOND NOS: 7

SEQUENCE: FELLING SECOND NOS: 7

SEQUENCE: FELLING NOS: 7

SEQUENCE: SECOND NOS: 7

REPRESENTED NOS: 7

SEQUENCE: SECOND NOS: 7

SEQUENCE SECOND NOS: 7

SECO
                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                                                                                                                                                                                          Query Match 14.2N; Score 110; DB 1; Length 53; Best Local Similarity 59.4H; Pred. No. 0.00045; Metches 19; Conservative 4; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
14.21; Score 110; DB 4; Length 53;
Best Local Smilarity 59.44; Pred. No. 0.00045;
Matches 19; Conservative 4; Mismatches 9; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 12.7%; Score 99; DB 6; Length 23; Best Local Smilarity 100.0%; Pred. Wo. 0.002; Matches 18; Conservative 0; Wismatches 0; Indels
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5451577
PALCANT: SARIN, VIRENDER K.; BODNER, JOHN B.
TITLE OF INVENTION: HCG PEPTIDES FOR USE IN ANTIBODY
TITLE OF INVENTION: HCG PEPTIDES FOR USE IN ANTIBODY
PRICHATION PROCEDURES:
NUMBER OF SEQUENCES: 14
ROBERT APPLICATION DATA:
APPLICATION UNMBER: US/07/647,893
FILING DATE: 30-JAN-1991
RRICH APPLICATION DATA:
APPLICATION NUMBER: 32,731
FILING DATE: 10-JUL-1989
APPLICATION NUMBER: 22,71687
FILING DATE: 20-JUL-1988
SED ID NO.3
FILING DATE: 20-JUL-1988
FILING DATE: 20-JUL-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21 CELTNITIAIEKEECRECISINTTWCAGYCYT 52
                                                                                                                                                                                                                                                                                                                                                                                                                                     10 CRPINATLAVEKEGCPVCITVNTTICAGYCPT 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 CELTNITIAIEKEECRFCISINTTWCAGYCYT 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10 CRPINATLAVEKEGCPVCITVNTTICAGYCPT 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENGTH: 53 amino acids
TYPE: amino acid
TYPE: allow acid
TOPOLOGY: linear
WOLECULE TYPE: protein
US-08-239-256-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; LENGTH: 53
; TYPE: PRT
; OKGANISM: Homo saptens
US-09-305-639-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LENGTH: 23
5451527-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
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                                                                                                                                                                                                                                                                      2; Gaps
                                                                                                                                                                                                                                                                                                                                          51 PALPOV--VCHYRDVRFESIRLPGCPRGVNPVVSYAVALSCOCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 PARPKIOKTCTFKELVYETVRVPGCAHHADSLYTYPVATQCHCGKCDSDSTDC 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION STATING MATCH, MATCH M.
APPLICANT BOILD. RAVING; MATCH, MATTH M.
TITLE OF INVENTION: MODIFIED FORMS OF REPRODUCTIVE HORMONES;
NUMBER OF SEGUENCES: 16
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/532,254
FILING DATE: 01-UN-1907
PRICE APPLICATION NUMBER: 133,646
FILING DATE: 11-FEB-1999
                                                                                                                                                                           Ouery Match 15.1%; Score 117; DB 1; Length 75; Best Local Smilarity 14.0%; Pred. No. 0.00014; Matches 18; Conservative 14; Hismatches 19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Onery Match 15.1%; Score 117; DB 6; Length 76; Best Local Smilarity 34.0%; Pred. No. 0.00014; Matches 18; Conservative 14; Mismatches 19; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: U.S.A

COUNTRY: U.S.A

COUNTRY: L. U.S.A

COUPTER ENABABLE FOR IN

MEDIUM TYPE: Floppy disk

MEDIUM TYPE: Floppy disk

MEDIUM TYPE: Floppy disk

OPERATIG SYSTEM: PC-DOS/MS-DOS

COURDENT PROFILED FROM TO NOW TO 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US/08239256
Patent No. 588384
GEREAL INFORMATION
APPLICANT: BOTHE INFUNG
APPLICANT: MATEUR, MATEUR
APPLICANT: MATEUR, MATEUR
ITLE OF INFUNTION:
TITLE OF INFUNTION: CTP EXTENDED FORM OF LH
MUMBER OF SEQUENCES: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: MORRISON & FOERSTER
STREET: 2000 Pennsylvania Ave. N.W.
CITT: Washington, D.C.
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-239-256-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
ZIP: 20006-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;SEQ ID NO:5:
; LENGTH: 76
5177193-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 107
US-08-239-256-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 106
5177193-5
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RESULT 110 US-08-036-555B-20

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APPLICANT: Minghetti, Luisa; Waterfield, Michael; Marchioni, Mark; APPLICANT: Chen, Malo Su, Hiles, Iman Title OF INVENTION: Gilal Mitogenic Factors, Their TITLE OF INVENTION: Preparation and Use CONRESPONDENCE: 184
CORRESPONDENCE: 1816
ADDRESSEE: Felfe & Lynch
STRERT: WOS, Third Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Goodearl, Andrew; Stroobant, Paul;
Minghetti, Luiss; Waterfield, Michael; Marchioni, Mark;
Chen, Maio Su; Hiles, Ian
WUENTION: Glial Mitogenic Factors, Their
WUENTION: Preparation and Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 91; DB 1; Length 26;
Pred. No. 0.013;
5; Mismatches 4; Indels
                                                                                                                           ADPRESSEE: Felfe & Lynch
STREET: 905 Third Avenue
CITY: New York City
COUNTRY: Use YOR
COUNTRY: USA
COMPUTER: RRANALE FORM:
MEDIUM TIPE: Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRICKAPLICATION NUMBER: 07907,138

PILING DATE: 30-10N-1992

PRIOR PAPLICATION NUMBER: 07683,703

PRIOR PAPLICATION NUMBER: 07683,703

PRIOR PAPLICATION NUMBER: 07683,703

PRICKAPLICATION NUMBER: 07683,703

PRICKAPTION NUMBER: 07683,703

PRICKAPTION NUMBER: 07683,703

APPLICATION NUMBER: 07693,703

RECEDENTION NUMBER: 07693,703

RECEDENTION NUMBER: 07693,703

TELEDRAIN ON NUMBER: 07693,703

TELEDRAIN (212) 689-2200

TELEDRAIN (212) 689-2304

TELEBRAIN (212) 689-2304

TELEBRAIN (2000) 893-3844
                                                                                                                                                                                                                                                               RESULT 112
US-08-249-322A-20
Sequence 20, Application US/08249322A
Sequence 10, 5716930
GENERAL INFORMATION:
GENERAL INFORMATION:
MALE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 23-OCT-1992
PRICE APPLICATION DAY
APPLICATION NOWER: 07/940, 389
FILING DATE: 03-SEP-1992
PRICE APPLICATION DATE: 03-SEP-1992
APPLICATION NOWER: 07/907,138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 11.7%; So
Best Local Similarity 61.5%; Pr
Matches 16; Conservative 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TOPOLOGY: linear
US-08-469-569-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ογ
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                                                                                                                           APPLICANT: Goodearl, Andrew; Stroobant, Paul;
APPLICANT: Migherti, Luisa; Materfield, Michael; Marchionl, Mark;
APPLICANT: Migherti, Luisa; Materfield, Michael; Marchionl, Mark;
APPLICANT: Chen, Maio Su, Hilos, Lan
TITLE OF INVENTION: Glial Mitogenic Rectors, Their
TITLE OF INVENTION: Preparation and Use
NUMBER OF SEQUENCES: 184
ADDRESSED: Felfe & Lynch
STREF: 805 Third Avenue
GITY: New York City
STRIF: New York
ZIP: 10022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery March 11.7%; Score 91; DB 1; Length 26; Best Local Similarity 61.5%; Pred. No. 0.13; Matches 16; Conservative 6; Wismarches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                     ZIP: 10022
WONDUTER READABLE FORM:
NEDUJU TYPE: Diskette, 5.25 inch, 360 kb storage
COMPUTER: IBM ........
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 111.
9.08-469-569-20
1. Sequence 20, Application US/08469569
1. Patent No. 5606012
1. APPLICANT: Goodearl, Andrew: Stroobant, Paul;
                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM
COMPUTER: IBM
COMPUTER: Not SYSTEM
SOFTWARE: Wordperfect
SOFTWARE: Wordperfect
TLING DATE: 24 HAR-1993
CLASSIFICATION WHREN: WORDS
REIGATION WINGRE: WOYGE,173
FILING DATE: 32 HAR-1992
REIGATION WHREN: WOYGE,173
FILING DATE: 32 HAR-1992
REIGATION WHREN: WOYGE,173
FILING DATE: 32 HAR-1992
FILING DATE: 0. APR. 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
PRELICATION NUMBER: U.K. 91 07566.3
FILING DATE: 10-APRIL-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    at, Christine H.
TON NUMBER: 34,266
                                                           sequence 20, Application US/08036555B
Patent No. 5530109
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATION DATA:
NN NUMBER: 07/863,703
E: 03-APRIL-1992
ATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    62 DVRFESIRLPGCPRGVNPVVSYAVAL 87
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FION DATA:
NUMBER: 07/907,138
: 30-JUN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET UNDREST. LUD
TELECHRUNE: (212) 688-2200
TELECHRUNE: (212) 888-3200
TELECHRUNE: (212) 888-3884
INFORMATION FOR SEQ ID 0.0.
LEWNTH: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
US-08-036-5558-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: TSA
REGISTRATI
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4; Indels
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STRTE: MA
COUNTRY: USA
LIVE: 10310
CONFUTER READABLE FORM:
WEDLING TYPE: Diskette
COMPUTER: IBM COMPATIBLE
COMPUTER: LBM COMPATIBLE
COMPUTER: LBM COMPATIBLE
COMPUTER: LBM COMPATIBLE
COMPUTER: LBM COMPATIBLE
COMPUTER: OF WINDER: US/08/469,526A
FILLING DATE: 06 June 1995
CLASSIFCATION 133
PROFESTIONER: 045
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Best Local Similarity 61.5%; Pred. No. 0.013;
Matches 16; Conservative 6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DARE: 23-07-1592
PELING DARE: 13-07-1592
PELING DARE: 03-07-1592
APPLICATION NUMBER: 07-07-139
FILING DARE: 03-07-1992
APPLICATION NUMBER: 07-07-139
FILING DARE: 03-08-11-1592
APPLICATION NUMBER: 07-06-3.703
APPLICATION NUMBER: 07-08-3-703
APPLICATION NUMBER: 07-08-3-703
APPLICATION NUMBER: 39-109
REFERENCE/DOCKET NUMBER: 39-109
TELECONMUNICATION NUMBER: 39-109
TELECONMUNICATION NUMBER: 39-109
TELECONMUNICATION NUMBER: 04585/00200A
TELECONMUNICATION NUMBER: 04585/00200A
TELECONMUNICATION NUMBER: 04585/00200A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PELICATION: 433.
APPLICATION: 478.
APPLICATION MATA:
APPLICATION MURBER: 08/036,555
FILING DATE: 24-MAR-1993
APPLICATION WINGER: 07/965,173
APPLICATION WINGER: 07/940,389
PILING DATE: 03-56F-1992
APPLICATION WINGER: 07/907,138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0, Application US/08734591A
5854220
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                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbi
STREET: 176 Federal Str
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 114
US-08-734-591A-20
; Sequence 20, Appl
; Patent No. 585422
; GENERAL INFORMAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
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CORRESPONDENCE ADDRESS:
ADDRESSE: Felse & Lynch
STREET: 805 Third Avenue
CTTY: New York
COUNTR: 05A
CUNTRY: 05A
CUNTRY: 05A
COMPUTER: EDIASELE, 5.25 Inch, 360 kb storage
COMPUTER: IBM
COMPUTER: TAM

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFCATION DATA:

PRIOR APPLICATION NUMBER: 08/036,555

FILING DATE: 24 4MR-1993

PRIOR APPLICATION NUMBER: 08/036,555

FILING DATE: 23 6CT-1992

PRIOR APPLICATION NUMBER: 07/940,389

FILING DATE: 03-5EP-1992

PRIOR APPLICATION NUMBER: 07/940,389

FILING DATE: 03-5EP-1992

PRIOR APPLICATION DATA: 13-7EP-1992

PRIOR APPLICATION NUMBER: 07/96,3703

PRICERPRINCE/DOCKET NUMBER: 34,266

REFERENCE/DOCKET NUMBER: 34,266

REFERENCE/DOCKET NUMBER: 34,266

REFERENCE/DOCKET NUMBER: 34,266

REFERENCE/DOCKET NUMBER: 34,266

REFERENCE/OFCKET NUMBER: 34,2
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFWARE: WOOLGERIEGE
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/249,322A
FILING DATE: 25-HAY-1994
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
US-08-249-322A-20
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4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 11.74; Score 91; DB 2; Length 26; Best Local Similarity 61:34; Pred. No. 0.1013; Matches 16; Conservative 6; Mismatches 4; Indels Matches 16; Conservative 6; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11.7%; Score 91; DB 4; Length 26;
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APPLICANT: MINGHETTI, LUISA
APPLICANT: MEREFFELD, MICHAEL
APPLICANT: CHEN, MARIO S.
APPLICANT: CHEN, MARIO S.
APPLICANT: CHEN, MARIO S.
TITLE OF INVENTION: CHERERARYION AND USE
TITLE OF INVENTION: CHERERARYION AND USE
CURRENT PELLING DATE: 1995-06-06
EARLIER APPLICATION NUMBER: 08/036/555
EARLIER FILING DATE: 1995-06-08
EARLIER FILING DATE: 1995-03-03
EARLIER FILING DATE: 1995-06-08
EARLIER FILING DATE: 1995-06-0
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                  PELLIAGION NATE:
CLASSIFICATION: 435
PRIOR APPLICATION HATA:
APPLICATION NUMBER: 09,101,396
FILING DATE: 29-JAN-1993
PRIOR APPLICATION NUMBER: 07/984,085
FILING DATE: 29-JAN-1993
PRIOR APPLICATION NUMBER: 07/981,747
PRIOR APPLICATION NUMBER: 07/921,747
PRIDENON NUMBER: 07/921,747
PRIDE
                                                                                                                                        COMPUTER: IBM
OPERATING SYSTEM: PC-DOS
SOFTWARE: Wordperfect
GURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/469,660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20, Application US/08470335F
Patent No. 6147190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 DVRFESIRLPGCPRGVNPVVSYAVAL 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 20
LENTH: 26
TYPE: PRT
COGNISM: Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
US-08-469-660-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 116
US-08-470-335-20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Gyvnac, David I.; Marchionni, Mark;
APPLICANT: Gyvnac, David I.; Marchionni, Mark;
APPLICANT: Medannay, Mobert N.
TITLE OF INPWRITON: INHIBITORS OF CELL PROLIFERATION,
TITLE OF INPWRITON: THEIR PREPARATION AND USE
CORRESPONDENCE 184
CORRESPONDENCE ADDRESS: 184
ADDRESSEE: Fish & Richardson
STREET. 225 Frankin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APLICATION OF THE TOTAL 
                                                                                           COMPUTER READABLE FORM:
WEDION TYPE: 3.5 "Diskette, 1.44 Mb
COMPUTER: INH COMPUTER: 1.14 Mb
COMPUTER: INH COMPUTER: MINDOWS ST
SOFTWARE: Worder-feet (Version 7.0)
SOFTWARE: Worder-feet (Version 7.0)
APPLICATION DATA:
APPLICATION NUMBER: US/08/734,591A
FILING DATE: 22-OCT-1996
CLASSIFFICATION DATA:
APPLICATION MUMBER: 08470,335
FILING DATE: 06-JUN-1995
FILING DATE: 07-NR-1995
FILING DATE: 07-NR-1995
FILING DATE: 07-NR-1995
FILING DATE: 07-NR-1995
FILING DATE: 07-NR-1993
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EFFLICATION MARKER: 07/940,389
HIGO DATE: 03-SEP-1992
APPLICATION DATA: 07/907,138
LICATION WINGER: 07/907,138
MKG DATE: 30-JUN-1992
APPLICATION DATA: 07/903,703
KKG DATE: 03-APR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20, Application US/08469660 Patent No. 5876973 GENERAL INFORMATION:
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STATE: Massachusetts
COUNTY: 02.04

2.10: 0210
COMPUTER READBLE FORM:
WEDJUN TYPE: 3.5 ** Diskette, 1.44 MD
CONFORR: 1 EM COMPACIBLE PERILUM
CORMOTRE: 1 EM COMPACIBLE PERILUM
CORRENT APPLICATION DATA:
SUPPLICATION NATE: 2.2 **CT-1396
CLASSIFICATION: 536
FRIOR APPLICATION NATE: 3.2 **CT-1396
FRIOR APPLICATION NATE: 3.2 **CT-1396
FRIOR APPLICATION NUMBER: 06/249,322
FRIING DATE: 2 **CM-1994
FRIING DATE: 2 **CM-1994
FRIING DATE: 2 **CM-1994
FRIING DATE: 2 **CM-1994
FRIING DATE: 3.2 **CT-1992
FRIING DATE: 3.2 **CT-1992
FRIING DATE: 3.2 **CT-1992
FRIING DATE: 3.3 **APR-1992
FRIING DATE: 10 **APR-1991
FRIING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 11.7%; Score 91; DB Best Local Similarity 61.5%; Pred. No. 0.0 Matches 16; Conservative 6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 119
US-08-470-339-20
US-08-470-339-20
'Sequence 20, Application US/08470339C'
'Patent No. 633286
'FRNERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Onery Match 11.74; Score 91; D9 4; Length 26; Berl and Consolismilarity 61.54; Pred No. 0.013; Hatches 16; Conservative 6; Mismatches 4; Indels Hatches 16; Conservative 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: GLIAL MITOCERIC FACTORS, THEIR TITLE OF INVENTION: GLIAL MITOCERIC FACTORS, THEIR TITLE OF INVENTION: GREENACH AND USE TILE OF INVENTION: GREENACH AND USE CHIEF TAPLICATION WHORSE: USY08/735,021B CHREEN APPLICATION WHORSE: USY08/735,021B CARLIER APPLICATION WHORSE: 096.402.05 EARLIER APPLICATION WHORSE: 097036,535 EARLIER FILING DATE: 1939-03-04.03 EARLIER FILING DATE: 1939-03-04.03 EARLIER FILING OATE: 1932-03-03-04.03 EARLIER FILING DATE: 1932-03-03-04.03 EARLIER FILING DATE: 1932-03-03-04.03 EARLIER FILING DATE: 1932-04-03 EARLIER EARLIER FILING DATE: 1932-04-03 EARLIER EARLIER FILING DATE: 1932-04-03 EARLIER EARLIE
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APPLICANT: Watericled, Michael
APPLICANT: Marchionni, Mark
APPLICANT: Chen, Wantio and
APPLICANT: Chen, Wantio and
APPLICANT: Hilbs, Lan
TITLE OF INVENTION: GLIAL MITOGENIC FACTORS, THEIR
TITLE OF INVENTION: PREPARATION AND USE
NUMBER OF SEQUENCES: 187
                             Best Local Similarity 61.5%; Pred. No. 0.013;
Matches 16; Conservative 6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 117
9.08-735-01-20
9.5-08-735-01-20
9.5-08-735-01-20
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9.5-08-735-01-20
9.5-08-735-01-
                                                                                                                                                                                               Sequence 20, Application US/08734664A
Patent No. 6204241
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; ORGANISM: Bos taurus
US-08-735-021-20
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US-08-734-664A-20
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Sequence 20, Application PC/TUS9506846A
GENERAL INFORMATION:
APPLICANT: Goodearl, Andrew David; Stroobant, Paul;
APPLICANT: Goodearl, Andrew Basid; Stroobant, Mark;
APPLICANT: Chen, Aulo Su; Biles, Ma
APPLICANT: Chen, Aulo Su; Biles, Man
TITLE OF INVENTION: Glial Mitogenic Pactors, Their
TITLE OF INVENTION: Preparation and Use
CORRESPONDENCE ADDRESS:
                                                                             Query Match 11.74; Score 91; DB 5; Length 26; Best Local Similarity 61:54; Pred. No. 0.015; Matches 16; Conservative 6; Hismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSTE: Folic # Lynch
STREEN: 805 Third Avenue
CTTY: New York City
CONTR: New Tork
CONTR: USA
CONTR: USA
CONTR: DISA
CONTR: PER REDABLE FORM:
CONTRE: ISA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 07/907,138
FILING DAFE: 30-010N-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/863,703
FILING DAFE: 07-863,703
FRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
FILING DAFE: 10-APPLICATION DATA:
ATTORNEY ACRET INFORMATION:
ATTORNEY ACRET INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM
COMPUTER: TIBM
COMPUTER: WOOTGBETFOCT
SOFTHARE: WOOTGBETFOCT
SOFTHARE: WOOTGBETFOCT
APPLICATION NUMBER: PCT/VS95/06846A
PILING DATE: 15-NAY-1995
PRIOR APPLICATION NUMBER: 08/749, 322
APPLICATION NUMBER: 08/749, 322
FILING DATE: 26-NAY-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CALLOW DALA:

10. NUMBER: 07/965,173
TE: 23-OCT-1992
ATION DATA:
ON NUMBER: 07/940,389
TE: 03-SEP-1992
CATION DATA:
                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/036,555
FILIGHO DATE: 24-ARR.1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/965,173
         ; TOPOLOGY: linear
PCT-US94-05083C-20
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SCHUEL 120
SCHUEL 20, Application PC/TUS9405083C
SCHUERAL INFORMATION:
APPLICANT: Robert Sklar, Mark Marchionni, APPLICANT: Robert Sklar, Mark Marchionni, TITLE OF INFURNION: METHODS FOR ALTERING TITLE OF INFURNION: MUSCLE CONDITION NUMBER OF SEQUENCES: 185
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson STREET: 225 Franklin Street
CITY: Boston Street
STATE: Massachuette
ZIP: O2110_2804@ette
COMPUTER REAABLE FORM:
MEDIUM TIPE: Disketce, 5.25 inch, 360
MEDIUM TIPE: Disketce, 5.25 inch, 360
MEDIUM TIPE: Disketce, 5.25 inch, 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 11.7%; Score 91; DB 4;
Best Local Similarity 61.5%; Pred. No. 0.013;
Matches 16; Conservative 6; Mismatches
CURRENT APPLICATION NUMBER: US/08/470,339C

CURRENT FILING DATE: 1959-66-66

EARLIER FILING DATE: 1959-66-66

EARLIER FILING DATE: 1959-66-66

EARLIER FILING DATE: 1952-60-03

EARLIER FILING DATE: 1952-09-03

EARLIER FILING DATE: 1952-09-03

EARLIER FILING DATE: 1952-09-03

EARLIER FILING DATE: 1952-06-10

EARLIER FILING DATE: 1992-04-10

EARLIER FILING DATE: 1999-04-10

SEQ ID NOS: 226

SOFTWARE: FASTESO for Windows Version 4.0

LENGTH: 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/209,204
FILING DATE: 08-MAR-94
PRIOR APPLICATION DATA:

FILING DATE: 06-MAR-94
APPLICATION NUMBER: 08/59,022
FILING DATE: 06-MAY-93
ATTORNEY AGENT INFORMATION:

NAME: CLEAK, PAULT, 104
REFERENCE/DOCKET NUMBER: 04/85/028W01
TELECHOMONICATION NUMBER: 04/85/028W01
TELECHOMONICATION NUMBER: 04/85/028W01
TELECHOMONICATION NUMBER: 04/85/028W01
TELECHOMONICATION NUMBER: 04/85/07
TELECHOMONICATION NUMBER: 20016
TELEX: 200154
INFORMATION POR SEQ ID NO: 20:
SEQUIEME CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER 1BM
OPERATING SISTEM: PC-DOS
SOFTWARE PADLICATION DATA.
APPLICATION NATA.
FILING DATE: 06-MAY-94
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
CORGANISM: Bos taurus
US-08-470-339-20
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Ouery Match 11.3%; Score 88; DB 3; Length 782;
Best Local Similarity 23.1%; Pred. No. 1.2;
Matches 34; Conservative 14; Mismatches 43; Indels 56; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62 DVRFESIRLPGCPRGVNPVVSYAVAL-----SCQ-CAL-CRRSTTDCGGPKDHPLTCD 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            592 DPPFCVAR---CPSGVKPDLSYMPIWKPPDEEGACQPCPINCTHSCVDL------ 637
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                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS: 10
CORRESPONDENCE ADDRESS: 10
STATE: PAID ALCO
STATE: CA
COUNTRY: DAID
STATE: CA
COUNTRY: USA
LIP: PAID ALCO
STATE: CA
LIP: PAID ALCO
STATE: CA
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STATE: CA
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COUNTRY: USA
LIP: PAID ALC
COUNTRY: USA
LIP: PAID ALC
COUNTRY: STEM: PAID
STORM: PAID AND
STORM: PA
                                                                                              WEREAL INFORMATION:
MEDICANT: Laus, Retner
APPLICANT: Ruegg, Curtis L.
APPLICANT: Wu, Hongyu
ITILE OF INVENTION: Immunostimulatory Composition and Method
NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 124
US-09-34-14-195-4
US-09-34-14-195-4
US-09-34-195-4
Sequence 4. Application US/09344195
Patent No. 621060-1
GENERAL INFORMATION:
RUPENTION: Laus, Feiner
W. Hongyu
TITLE OF INVENTION: Immunostimulatory Compositions
NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 113 DPRFQDSSSSKAPPPSLPSPSRLPGPS 139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ģ
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Best Local Similarity 23.1%; Pred. No. 1.2;
Matches 34; Conservative 14; Wismatches 43; Indels 56; Gaps
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                                                                                                          O; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5 PLRPRCRPINATLAV --- EKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYR 61
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: INDIVIDUAL ISOLATE: GM-CSF-Her-2 fusion protein; Fig. 8
US-09-146-283-4
      Query Match 11.74: Score 91; DB 5; Length 26; Best Local Similarity 61:5; Pred: NO. 0.013; Matches 16; Conservative 6; Mismatches 4; Indels Matches 16; Conservative 6; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 4, Application US/09146283
Patent No. 5976516
GRERAL INFORMATION
PAPLICANT: LAUS, Reiner.
APPLICANT: RUBGSY, Curits L.
APPLICANT: Mu, Hongru
TITLE OF INVENTION: Immunostimulatory Compositions
NUMBER OF SEQUENCES: 10
CORRESPONDENCES: 10
C
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CURTER: P4306
COMPTER EXABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
CONFUTER: INB PC COMPALEN.
CONFUTER: INB PC COMPALEN.
CONFUTER: PATENTIN STSTEM: PC-DOS/MS-DOS
CONFRENT APPLICATION DARA: 09/146,283
APPLING DARE: 03-SEPT-198
CLASSIFICATION: 536
ATOMET/AGET INFORMATION:
NAME: Judge, Linda R.
RESISTRANCE/OCCKET NUMBER: 42.702
FREFERENCE/DOCKET NUMBER: 7536-0010.21
FILECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62 DVRFESIRLPGCPRGVNPVVSYAVAL 87
                                                                                                                                                                                                                                                    :: | |:||||| ||:|:||: |||
1 ELSFASVRLPGCPPGVDPMVSFPVAL 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEHONE: 650-334-0800
TELEHONE: 650-334-0800
INFORMATION FOR SEQ ID NO: SEQUENCE CHRACTERISTICS:
LENCTH: 782 mains acids
TYPE: mains acid
TOPOLOGY: linear
HYPOTHETICAL:
HYPOTHETICAL:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 122
US-09-146-283-4
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CORRESPONDENCE ADDRESS: ADDRESSEE: Dehlinger & Associates

RESULT 123

: PC-DOS/MS-DOS tIn Release #1.0, Version #1.25

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RESULT 126

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 10.91; Score 85; DB 1; Length 42; Best Local Similarity 27.34; Fred. no. 0.084; Matches 17; Conservative 1; Mismatches 11; Indels Matches 27; Conservative 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 CRNTCCNCCTGACN------CNY----CNY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION:
APPLICATION:
ATTORNEY AGENT INFORMATION:
MAME: MURASHIGE, KATE H.
REGISTRATION WHEBRE: 29,599
REFERENCE/DOCKET NUMBER: 29,599
TELECOMOUNICATION INFORMATION:
TELEFAN: (202) 887-506
TELEFAN: (202) 887-106
TELEFAN: (202
                                                                                                          CURRENT APPLICATION DATA:
APPLICATION NUBBR: US/08/239,256
FILING DATE: 06-MAY-1994
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTORNEY FABRET INFORMATION:
ACTORNEY FABRET INFORMATION:
NAME: KONSTI, ANTONIET F.
NAME: KONSTI, ANTONIET F.
TRECISCHANUISTON HUMBER: 34.2020
REFERENCE/COCKET NUMBER: 2020
TELECOMMUNISTATION:
TELECOMMUNISTATION:
TELECOMMUNISTATION:
TELETATION: (415) 494-0792
TELET: 706141
INFORMATION: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EQUENCE CHARACTERISTICS:
LENGTH: 376 amino acids
TYPE: amino acid
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Bost Local Similarity 23.1%; Pred: No. 1.2;
Matches 34; Conservative 14; Mismatches 43; Indels 56; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                562 PCHPECQPQNGSVTCFGPEADQCVAC-----AHYK 591
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: homo saplens
INDIVIDUAL ISOLARE: GM-CSF-Her-2 fusion protein; Fig. 8
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-344-195-4
                                                                                                                                                  CONTRY: USA

Z1P: 94306
COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPpy disk
COMPUTER: IBH PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             592 DPPFCVAR---CPSGVKPDLSYMPIWKFPDEEGACQPCPINCTHSCVDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HRY/AGBYT INPOWATION:
NAME: Judge, Linda R.
REDISTRATION UNBER: 42,702
REPERENCE/DACKET UNBER: 7536-0010.21
STREET: 350 Cambridge Ave. Suite 250 CITY: Palo Alto STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT BOINE, IRVING
APPLICANT MATTOR, MATTOR M.
APPLICANT: KERNE, JEFREY L.
TITLE OF INVENTION: CFF EXTENDED FORM OF LH
NUMBER OF SEQUENCES: 24
CORRESPONDENCES: 24
ADDRESSER: MOREIGON & FORESTER
STREET: 2000 Pennsylvania Ave. N.W.
CITT: Washington, D.C.
COUNTRI: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/146,283
FILING DATE: 03-SEPT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/09/344,195
FILING DATE: 24-Jun-1999
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            113 DPRFQDSSSSKAPPPSLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           638 DDKGCPAEQRASPLTSLEAPARSPSPS 664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17, Application US/08239256
Patent No. 5585345
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : Floppy disk
IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 650-324-0966
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 782 amino aci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP. 108. COMPUTER READABLE FORM:
WEDIUM TYPE: EIN POPY ALS
COMPUTER: IBM POPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 125
US-08-239-256-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNE
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APLICANT WANDERBERG, DAVID

TITLE OF INVENTION: REMATOPOLETIC GROWTH FACTORS, NUCLEOTIDE

TITLE OF INVENTION: REMATOPOLETIC GROWTH FACTORS AND METHODS OF USE

TITLE OF INVENTION: SEQUENCE: ACCOUNT OF THEREOF

NUMBER OF SEQUENCES: CONTRICTION: CONTRICTION OF THEREOF

CONTRESSONDEME ADDRESS:

ADDRESSEE: MORRISON & POERSTER

STATE: 194304-1018

CONTRICTE RADALES FORM:

CONTRICTED FORM:

CON
                                                                                                                                                               64 SLSSVVIVPSSSLGTQTYTCNVNHKPSNTKVDKRVE-LKTPLGDTTHTCPRCPEP---- 117
                                                                                                                                                                                                                                               85 VALSCQC-ALCRRSTTDCGGPK--DHPLTCDDPRFQDSSSSKAPP--PSLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                           Query Match 10.7%; Score 83.5; DB 2; Length 389; Best Local Similarity 28.6%; Pred. No. 1.4; Matches 48; Conservative 19; Mismatches 58; Indels 43; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62 DVRFESIRLPG------CPRGVNPV-----VSYAVALSCQCALCRRSTTDC 101
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                 52 ALPQVV------CCPRGVNPVSYA 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14 NATLAVEKEGCP-----VCITVN--TTICAGYC---PTMT-RVLQGVLPALPQVVCNYR 61
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ATTORNEY/MACH'S THORDATION:
MAME: KONST. ANTOINETE F.
REGISTRATION HUMBER: 34,202
REGISTRATION HUMBER: 34,202
PELECOMMUNICATION HUMBER: 34,202
TELEFRAM: (415) 494-0792
TELEFRAM: (415) 494-0792
TELER: 70614
INPORMYTOR POR SEQ ID NO. 2: SECURENCE CHARACTERISTICS:
LEMRITH: 389 amino acids
TTPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 128
US-08-485-449-2
US-08-485-449-2
Sequence 2, Application US/08485449
Patent No. 5824789
GENERAL INFORMATION
GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WOLECULE TYPE: protein US-08-485-449-2
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US-08-485-449-7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  125 HAVATA--CSLGRIVSCGCGWKGSGEQDR-LRAKLIQLQALSRGKFPSPSPPGSPS--PG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match 10.9%; Score 84.5; DB 2; Length 377;
Best Local Similarity 28.9%; Pred. No. 11;
Matches 52; Conservative 9; Mismatches 62; Indels 57; Gaps
                                                                                                                                         Query Watch 10.9%; Score 84.5; DB 2; Length 376; Best Local Similarity 28.3%; Pred. No. 1.1; Matches 52; Conservative 18; Mismatches 59; Indels 55; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                           83 YAVALSCQCALCRRSTTDCG----GPKDHPLTCDDPRFQDSSSSKAPPPSLP-SPSRLPG 137
                                                                                                                                                                                                                                                                     8 PRCRP-----TINATLAVEKEGCP----VCITVN--TICAGYC--PTMT 43
                                                                                                                                                                                                                                                                                                                 44 -RVLQGVLPALPQVVCNYRDVRFESIRLPG------CPRGVNPV-----VS 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 PSKEPLRPRCRPINATLAVEKEGC------PVCITVNTTICAGYCPTMTRVLQGV-LP 51
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US-984-671-277A-45

SEQUENCE A. Application US/08761277A

Patent No. 597334

GENERAL HOROMATION:

APPLICANT: Denney Jr., Dan W.

TITLE OF INVENTION: Leukemia

NUMBER OF SEQUENCES: 80

CORRESPONDENE ADDRESS: 80

CORRESPONDENE ADDRESS: 80

CITY: San Francis Carroll, LLP

CITY: San Francisco

CITY: San Francisco

CITY: San Francisco

CUNPUTER RADABLE FORM:

MEDINY TPE: Cloppy disk

COMPUTER RADABLE FORM:

MEDINY TPE: PLOPPY disk

COMPUTER READABLE FORM:

MEDINY TPE: PLOPPY disk

COMPUTER READABLE FORM:

MEDINY TPE: CLOS/NS-DOS

SOFTAMR: PETENTON MARIA:

FILING DATE: US-DOS/NS-DOS

REFERENCATION NUMBER: 38 230

REFERENCE/COCKET NUMBER: CENTTOPB-02406

FELCOMMUNICATION HORDER: CENTTOPB-02406
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amino acid
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; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-485-449-5
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US-08-761-277A-45
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59 NYRDVRFE--SIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLT---CDD 113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match 10.5%; Score 81.5; DB 2; Length 207; Best Locol Similarity 26.8%; Pred. No. 1.1; No. 1.1; Mismatches 65; Indels 33; Gaps Matches 40; Conservative 11; Mismatches 65; Indels 33; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 44 RATCOPREVVPITVELMGTVAKQLVPSCVTVQR--CGGCCPD-------DGLECVPT 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7 RPRCRP--INATLAVE-----KEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVC 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: ERIKSSON, 01f
APPLICANT: OLOFSSON, 11f
APPLICANT: ALITALO, KBIT
APPLICANT: ALITALO, KBIT
TITLE OF INVENTION: VASCULAR ENDOTHELIAL GROWTH FACTOR-B AND
TITLE OF INVENTION: UNSCULAR ENDOTHELIAL GROWTH FACTOR-B AND
WOMBER OF SEQUENCES:
100RESSONDER/C ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Evenson, McKeown, Edwards & Lenahan, P.L.L.C.
STREET: 1200 G Street, N.W., Suite 700
CITY: Washington
STRATE: DC
                                                                                                                                                                                                                                                                                     COMPUTER: IEBN FOOFT COMPUTER: COMPUTER: TEBN FOOTT COMPUTER: COMP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 114 PRF---QDSSSSKAPPPSLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            147 PRSVPGWDSAPGAPSPADITHPTPAPGPS 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 131
US-08 569-063C-15
is Sequence 15, Application US/08569063C
is Patent No. 592691
igneral INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26,269
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TELEFAX: (202) 628-8844
INFORMATION FOR SEQ ID NO:
               STATE: DC
COUNTRI: USA
ZIP: 20005
COMPUTER READABLE FORM:
HEDIUM TYPE: Floppy di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS
LENGTH: 207 amino aci
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein
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MOLECULE TYPE: protei
ORIGINAL SOURCE:
TISSUE TYPE: human
US-08-609-443B-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
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                                                                                                                                              GERERAL INCORATION:

TITLE OF INVERTION: HEACTORING GROWTH FACTORS, NUCLEOTIDE
TITLE OF INVERTION: HEACTORING GROWTH FACTORS, NUCLEOTIDE
TITLE OF INVERTION: THEREOF
NUMBER OF SEQUENCES:
CORRESORDENCE ADDRESS:
ADDRESSEE: MORRISON, FORESTER
STREET: 75 page Mill Road
CITT: Palo Alco
CITT: Palo Alco
CITT: Palo Alco
CITT: Palo Alco
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: ELEPPY disk
MEDIUM TIVE: Ploppy disk
MEDIUM TIVE: Ploppy disk
COMPUTER READALE FORM:
MEDIUM TIVE: Ploppy disk
COMPUTER READALE FORM:
MEDIUM TIVE: NEARTH RELEASE 11.0, VETSION #1.30
CUNRENT APPLICATION
OPERATION STEM: 40.004
TILING DATE:
CLASSIFICATION NUMBER: 34.202
RESTSTATION NUMBER: 34.202
RESTSTATION NUMBER: 34.202
RESERRENCE CHARACTERISTICS:
RECECOMONICATION INDEMATION:
TELEBONE: (415) #44-0792
TELECOMONICATION INDEMATION:
TELEBONE: (415) #44-0792
TELECOMONICATION INDEMATION:
TELEBONE: MAINTENER COUNCY:
TELEBONE: LENGTH STEMPLE CONTINUATION OF STEMPLY CONTINUATION OF STEMPLY CONTINUATION INDEMATION OF STEMPLY CONTINUATION INDEMATION 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62 DVRFESIRLPG-------CPRGVNPV-----VSYAVALSCQCALCRRSTTDC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     89 DORHNCSALEGGGRLPHHSAILKRGFRESAFSFSMLAAGVHHAVATA--CSLGKLVSCGC 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29 NEILGIALPGEPPLIGNIVCLTLSGLSKRQLGLCLRNPDVTASALQGLHIAVHECQHQLR 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14 NATLAVEKEGCP-----VCITVN--TIICAGYC---PTMT-RVLGGVLPALPQVVCNYR 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 130
02-06-667-413B-15
5 Sed-667-413B-15
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1200 G Street, N.W., Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             102 G----GPKDHPLTCDDPRFQDSSSSKAPPPSLPSP----SRLPGPSDT 141
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Sequence 7, Application US/08485449
Patent No. 5824789
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ARBLIANT: SCHILORAT. UWE
ARBLIANT: SCHILORAT. UWE
ARBLIANT: SCHILORAT. UWE
ARBLIANT: FISCHER, BEICHLOACH
APPLICANT: FALKNER, FAING-GUETHER
APPLICANT: EIBL. JOHAN
APPLICANT: EIL OR INVENTION: A FUSION PROTEIN COMPRISING A FURIN
TITLE OF INVENTION: BERIVATIVE OR A DERIVATIVE OF A FURIN ANALOGUE AND A
TITLE OF INVENTION: HETEROLOGOUS SEQUENCE
NUMBER OF SEQUENCES: 29
CORRESPONDEME ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 10.1%, Score 78.5; DB 4; Length 709; .
Best Local Similarity 25.3%, Pred. No. 8.5; Matches 39; Conservative 18; Mismatches 46; Indels 51; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        575 PEGLPVPPESSGCKTLTSS-----QACVVCEEGFSLHQKSCVQHCP------PGFA 619
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTMTRVLQGVLPAL- 53
MEDICH TIPE: Floppy disk
COMPUTER: IBN PC COMPUTED:
COMPUTER: IBN PC COMPUTED:
CORPERATING SYSTEM: PC-DOS/NS-DOS
SUFFRARE: Patentin Release 11.0, Version 11.30
SUFFRARE: Patentin Release 10.0, Version 11.30
FILING APELICATION DATA:
APELICATION NUMBER: 05/NS/33,247
FILING DATE: 22-NOV-1996
FILING DATE: 124-NOV-1995
ATTOREY/ACTE 124-NOV-1995
ATTOREY/ACTE 124-NOV-1995
ATTOREY/ACTE 124-NOV-1995
REGISTRATION NUMBER: 29,768
REFERENCE/COCKET NUMBER: 29,768
REFERENCE/COCKET NUMBER: 29,768
TELECOMMONICATION NUMBER: 29,768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WEDIDM TREE: Floppy of the Competition of Competiti
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STREET: 3000 K Street, N.W., Suite 500
CITY: Washington
CONTRES: 0.6.
COUNTRY: USA
COMPUTER READABLE FORM:
HEDIUM THES: Floppy disk
COMPUTER: IM PC COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 667 SLDPVEQTCS----ROSOSSRESPPQ-QQPPRLP 695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION:
CANT: SCHLOKAT, UWE
CANT: FISCHER, Bernhard
CANT: FALKWER, Falko-Guenther
CANT: DORNER, Friedrich
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 9, Application US/08753247
Patent No. 6210929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX: 901136
TELEX: 901136
TELEX: 901136
INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHRANCTERISTICS: LENGTH: 709 anino acid TOPOLOGY: Innear HOLECULE TYPE: Proceed NO: 9075-347-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 133
JS-08-753-247-9
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TITLE OF INVENTION: DEALWATIVE OR A DERIVATIVE OF A FURIN ANALOGUE AND A
NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93 GQHQVRWQILMIRYPSSQLGEMSLEEHS-----QCE-CRPKKKDSAVKPDRAATPHHRPQ 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    59 NYRDVRFE--SIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGPKDHPLT---CDD 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 10.5%; Score 81.5; DB 2; Length 207; Best Local SImilarity 26.8%; Pred. No. 1.1; Marches 40; Conservative 11; Mismatches 65; Indels 33; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7 RPRCRP--INATLAVE-----KEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVC 58
                                                                                                                              MEDIUM TIPE: Floppy disk
COMPUTER: INAPPY disk
COMPUTER: INAP COMPAILED
CONTRARE: TEMP COMPAILED
CONTRARE: DAEAGIL TO Release #1.0, Version #1.25
SOFTWARE: Paceful In Release #1.0, Version #1.25
SURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/569,063C
FILING DATE: 06-DEC-1995
RILING DATE: 06-DEC-1995
RILING DATE: 06-JUN-1995
REGISTRATION NUMBER: US/08/37,651
RILING DATE: 01-MRX-1995
RECISTRATION NUMBER: 20,269
RESPERRENCE/CONCET NUMBER: 1064/41979CP3
TELEPHONE: (122) 628-8804
TELEPHONE: (122) 628-8804
REPERRENCE CONCET NUMBER: 1065-8804
REPERRENCE CONCET NUMBER: 105-8804
REPERRENCE CONCET NUMBER: 106-8804
REPERRENCE CONCET NUMBER: 106-8804
REPERRENCE CONCET NUMBER: 106-8804
REPERRENCE CONCET NUMBER: 106-8804
REPORTER SEQ 100-901
REPERRENCE CONCET NUMBER: 106-8804
REPORTER SEQ 100-901
REPERRENCE CONCET NUMBER: 106-8804
REPORTER SEQ 100-901
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3000 K Street, N.W., Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            114 PRF---QDSSSSKAPPPSLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           147 PRSVPGWDSAPGAPSPADITHPTPAPGPS 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SCHLOKAT, Uwe
FISCHER, Bernhard
FALKNER, Falko-Guenther
DORNER, Friedrich
EIBL, Johann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 6, Application US/08753247
Patent No. 6210929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 207 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDMESS: single
TOPOLOGY: linear
NOLECULE TYPE: protein
ORIGINAL SOURCE:
TISSUE TYPE: human
US-08-69-063C-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS ADDRESSE: Foley 4 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 20007-5109
COMPUTER READABLE FORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Washington
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COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -247-6
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us-09-813-398-3.default.rai

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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/621,457
FILING DATE: 30-NOV-1990
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Quest Match 10.1%; Score 78.5; DB 4; Length 713; Best Local Similarity 25.3%; Pred. No. 86, Marches 3; Conservative 18; Mismatches 46; Indels 51; Gaps 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: SCHLOKAT, Uve
APPLICANT: FISCHER, Benchlard
APPLICANT: FLAKER, Palko-Guenther
APPLICANT: FALKER, Palko-Guenther
APPLICANT: EIBL, Johann
APPLICANT: EIBL, Johann
TITLE OF INVENTION: A FUSION PROTEIN COMPRISING A FURIN
TITLE OF INVENTION: DERIVATIVE OR A DESIVATIVE OF A FURIN
TITLE OF INVENTION: HETEROLOGOUS SEQUENCE
MINTER OF A FURIN ANALOGUE AND A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    54 POVVCNY----RDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCR-RSTTDCGGPKDH- 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             620 PQVLDTHYSTENDV--ETIRASVC------APCHASCATCQGPALTDCLSCPSHA 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         575 PEGLEVPPESSGCKTLTSS-----DACVVCEBGFSLHQKSCVQHCP-----PGFA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTMTRVLQGVLPAL- 53
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CORRESPONDENCES: 29
CORRESPONDENCE ADDRESSES:
ADDRESSEE: FOLGY & LAIGHER
CITY: Washington
CITY: Washington
CITY: Washington
COUNTRY: USA
ZIP: 20007-5109
COMPUTER: FOLGY GISH
COMPUTER: TO PROPER TIME PC COMPUTER: TO PROPEY TIME PC TO TO THE PC TO TO THE PC TO T
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PRIOR APPLICATION NUMBER: AT 1928/95
ATTORNEY AGENT AT 1928/95
ATTORNEY AGENT HORDARITON:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/COCKET NUMBER: 4043/1/
TELENORMY (2021/672-5300)
TELEPAR: (2021/672-5300)
T
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Patent No. 6210929
GENERAL INFORMATION:
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PRIOR APPLICATION UNMERS. AT 1928/95
FILING DATE: 24 NOV-1995
ATTORNEY/ACETT INFORMATION:
NAME: BENT Stephen A.
REGISTRATION WINBER: 29,768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; MOLECULE TYPE: protein US-08-753-247-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 134
US-08-753-247-12
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Opery Match 10.11; Score 78.5; DB 4; Length 719; Best Local Similarity 25.34; Pred. No. 8.7; Matches 39; Conservative 18; Mismatches 46; Indels 51; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    54 POVYCNY----RDVRFESIRLPGCPRGVNPVVSYAVALSCOCALCR-RSTTDCGGPKDH- 107
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REMERAL INCORANTION:

APPLICANT: Brark, Anthony J.

APPLICANT: Tekang-Olson, Particla

APPLICANT: Tekang-Olson, Particla

APPLICANT: Tekang-Olson, Particla

APPLICANT: Tekang-Olson, Particla

APPLICANT: Wondy, Polly A.

TITLE OF INVENTION: Methods of Use Thereof

TITLE OF INVENTION: Methods of Use Thereof

CORRESSEE: Howson & Howson

ANDRESSEE: Ho
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  108 ---PL--TCDDPRFQDSSSSRAPPPSLPSPSRLP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIPICATION: 435
PRIOR APPLICATION DATA
APPLICATION NUMBER: US 07/621,092
PILICA DATE: 26-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION ONTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MBER: US 07/620,859
29-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 135
US-07-085-972A-2
; Sequence 2, Application US/07885972A
; Patient No. 5460950
; Patient No. 5460950
...PRIERAL INFORMATION:
TELECHMUNCATION INFORMATION:
SEQUENCE : 179 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: mino acids
TYPE: mino acids
TYPE: mino acids
TYPE: protein
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575 PEGLPVPPESSGCKTLTSS----QACVVCEEGFSLHQKSCVQHCP------PGFA 619
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match 10.1%; Score 78.5; DB 1; Length 794; Best Local Similarity 25.3%; Pred. No. 9.7; Best Local Similarity 25.3%; Branstches 46; Indels 51; Gaps Matches 39; Conservative 18; Mismatches 46; Indels 51; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         108 --- PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TIPE: Ploppy disk
COMPUTER: IBM PC COMPATIBLE
COMPOTER: IBM PC COMPATIBLE
COMPATING SYSTEM: PC-TOSS/MS-TOS
SOFTWARE: PAREITIN Release #1.24
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION MANER: US/08/M55,203
FILING DATE: 29-MAY-1997
CLASSIFICATION: 4.4
ATTORNEY/AGENT TINEOBANTION:
NAME: TIAN, JOSSICA H.
REGISTRATION WINEBRE: 40.846
REFERENCE/DOCKET MUMBER: 29.441 DIV
TELECOMMUNICATION INFORMATION:
ATTORNEY/AGENT INFORMATION:
NAME: BAK, MAYJ E.
REGISTRATION NUMBER: 31.21
REFERENCE/DOCKET NUMBER: G
TELECOMMUNICATION INFORMATION
TELECHONE: 215-540-9206
                                                                                                                                                                                                                  TYPE: AMINO ACID
TOPOLOGY: 1' CID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                ; MOLECULE TYPE: protein US-07-885-972A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 11753
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Jericho
STATE: New York
COUNTRY: U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      54 POVVCNY ---- RDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCR-RSTTDCGGPKDH- 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     620 PQVLDTHYSTENDV--ETIRASVC------APCHASCATCQGPALTDCLSCPSHA 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTMTRVLQGVLPAL- 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PERCENT NO. SHOUSON

PERCENTE TRYONALTION:

APPLICANT: BARK, ANTHLO J.

APPLICANT: BARK, ANTHLO J.

APPLICANT: Textuan-Olson, Patricia

APPLICANT: Textuan-Olson, Patricia

APPLICANT: Wasley, Louise

APPLICANT: Wasley

APPLICANT: Wasley

TITLE OF INVENTION: Expression of PACE in Host Cells and

TITLE OF INVENTION: Expression of Pace

TITLE OF INVENTION: Methods of Use Thereof

NUMBERS OF SEQUENCES:

ADDRESSEE: Byring House

CONFRESS PATRE: Pennsylvania

COMPUTER: Pennsylvania

COMPUTER: IMP PC Compatible

COMPUTER: IMP PC Compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

COMPUTER: Patrician Release #1.0, Version #1.25

FURBLICANTING SYSTEM: PC-LOS/MS-DOS

FURBLICANTING SATARE

FURBLICANTING SA
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PRICATION NUMBER:
APPLICATION NUMBER: US 07/621,092
FILING DATE: 25 NOV-1990
PRICA APPLICATION NAMBER: US 07/620,859
FLING DATE: 29 NOV-1990
PRICH APPLICATION NAMBER: US 07/620,859
PRICH APPLICATION NAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
PPLICATION NUMBER: US/07/885,972A
FILING DATE: 19920520
CLASSIFICATION: 435
                                      CATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/621,457
FILING DATE: 30-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4, Application US/07885972A
Patent No. 5460950
                          31,215
                                                                                                                                                                                              TYPE: ANINO ACID
TOPOLICGY: 110-1
                                                                                                       TELEPRONE: 215-540-920
TELEPRAX: 215-540-5918
INFORMATION FOR SEQ ID NO:
SEGUENCE CHARACTERISTICS:
LENGTH: 794 amino acid
                                                                                                                                                                                                                                                                                                      ; MOLECULE TYPE: protein US-07-885-972A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 136
US-07-885-972A-4
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Sequence 4. Application US/08745880

Sequence 4. Application US/08745880

Fatert No. 1965425

GERETAL INCORATION

APPLICANT: Bark, Anthony J.

APPLICANT: Refame, Radal J.

APPLICANT: Refame, Color Patricia

APPLICANT: Wasley, Louis Patricia

APPLICANT: Applicant Reports

CORRESPONDER: Applicant Reports

COUNTR: Spling House Corporate Center, P.O. Box 457

CITY: Spling House Corporate Center, P.O. Box 457

CITY: Spling House Corporate Center, P.O. Box 457

COUNTR: Rabable FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: Entertin Release $1.0, Version $1.25

CURRETT APPLICATION DATA:

APPLICATION NUMBER: US/08/745,880

FILING DATE: 00-NAY-1992

APPLICATION NUMBER: US 07/621,092

FILING DATE: 20-NAY-1990

PRICH APPLICATION DATA:

APPLICATION NUMBER: US 07/621,092

FILING DATE: 30-NAY-1990

PRICH APPLICATION NUMBER: US 07/621,443

FILING DATE: 30-NOY-1990

PROPERTY APPLICATION DATA:

APPLICATION NUMBER: US 07/621,443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                Query Match 10.1%; Score 78.5; DB 2; Length 794; Best Local Similarity 25.1%; Pred. No. 9.7; Matches 39; Conservative IB; Mismatches 46; Indels 51; Gaps 13;
                                                                                                                                                                                                                                                                                                                                                                                                                     575 PEGLPVPPESSGCKTLISS-----QACVVCEEGFSLHQKSCVQHCP------PGFA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     620 PQVLDTHYSTENDV--ETIRASVC------APCHASCATCQGPALTDCLSCPSHA 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54 POVYCNY ---- RDVRFESIRLPGCPRGVNPVVSYAVALSCOCALCR-RSTTDCGGPKDH- 107
                                                                                                                                                                                                                                                                                                                                                                     1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTMTRVLQGVLPAL- 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BESULT 138

US -08-74-980-2

Sequence 2. Application US/08745880

Patcat No. 5865425

GENERAL INFORMATION:
APPLICANT: Barke, Anthony J.
APPLICANT: Rainan, Randal J.
APPLICANT: Walste, Anthony J.
APPLICANT: Walste, Anthony J.
APPLICANT: Walste, Louise Latter APPLICANT: Spring House Corporate Center, P.O. Box 457

COMPRESSEE: Howson & Howson STREET: Spring House Corporate Center, P.O. Box 457

COMPTER: Pennsylvania

COMPTER: Library Louise Compatible
OMENTIAL STREET: APPLICATION DATA:
APPLICATION WHERE: US 08/480,382

RILING DATE: 20-MV-1996

RICH APPLICATION WHERE: US 07/620,859

FILLING DATE: 20-MV-1990

PRIOR APPLICATION WHERE: US 07/621,443

FILLING DATE: 20-MV-1990

PRIOR APPLICATION WHERE: US 07/621,457

FILLING DATE: 30-MV-1990

PRIOR APPLICATION WHERE: US 07/621,457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             108 ---PL--TCDDPRFQDSSSSKAPFPSLFSPSRLP 136
|: || : | || : || || || || 667 SLDPVEQTCS----RQSQSSRESPPQ-QQPPRLP 695
SEQUENCE CHARACTERISTICS:
LENGTH: 794 annino acids
FYRP: annino acid
STRANDENESS: Single
TOPOLOGY: Linear
HOLECULE TYPE: Protein
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15181A REGISTRATION NUMBER: 31,215
REPERREADOCKEY UNDERS: 0151
TELEMONUNICATION INFORMATION:
TELEMONUNICATION INFORMATION:
TELEMON: 215-540-5818
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 794 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: MOLECULE TYPE: protein
US-08-745-880-2

Query Match 10.1%; Score 78.5; DB 2; Length 794; Best Local Similarity 25.3%; Pred. No. 9.7; Matches 39; Conservative 18; Mismatches 46; Indels 51; Gaps

13;

620 PQVLDTHYSTENDV--ETIRASVC-----APCHASCATCQCPALTDCLSCPSHA 666

108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136

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575 PECLPVPPESSGCKTLTSS-----QACVVCEEGFSLHQKSCVQHCP-------PGPA 619
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 10.11; Score 78.5; DB 2; Length 794; Best Local Similarity 25.34; Pred. No. 9.7; Matches 39; Conservative 18; Mismatches 46; Indels 51;
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APPLICANT: Wasley, Louise
APPLICANT: Wasley, Louise
TITLE OF INVENTION: Expression of PACE in Host Cells and
TITLE OF INVENTION: Expression of Service Cells and
TITLE OF INVENTION: Methods of Use Thereof
CORRESSES:
CORRESCES: Howson & Howson
STREET: Spring House Corporate Center, P.O. Box 457
CITY: Spring House Corporate Center, P.O. Box 457
STATE: Pennsylvania
STATE: Pennsylvania
COUFTE: Paring House Corporate Center, P.O. Box 457
ZIP: 19477
COMPUTE: Pennsylvania
COMPUTE: Pennsylvania
COMPUTE: TOPPO 41sk
COMPUTE: 
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      PRIOR APPLICATION DATA:

APPLICATION NUMBER: 0S 07/621,443

RILING DATE: 39-NOV-1990

PRIOR APPLICATION NUMBER: 0S 07/621,457

APPLICATION NUMBER: 0S 07/621,457

RILING DATE: 30-NOV-1990

ATORNEY AGERT INFORMATION:

REGISTRATION NUMBER: 31,215

REGISTRATION NUMBER: 31,215

REGISTRATION NUMBER: 31,215

REFERENCE/COCKTE NUMBER: 31
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Brake, Anthony J.
Kaufman, Rnadal J.
Tekamp-Olson, Patricla
Wasley, Louise
Wong, Polly A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 141
US-08-480-382-4
; Sequence 4, Application US/08480382
; Patent No. 5986079
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
US-08-480-382-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Watch 10.1%, Score 78.5; DB 2; Length 794; Best Local Similarity 25.3%, Pred. No. 9.7; Matches 39; Conservative 18; Mismacches 46; Indels 51; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              575 PEGLPVPPESSGCKTLTSS-----QACVVCESGFSLHQKSCVQHCP------PGFA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54 PQVVCNY----RDVRPESIRLPGCPRGVNPVVSYAVALSCQCALCR-RSTTDCGGPKDH- 107
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTMTRVLQGVLPAL- 53
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i Sequence 2, Application Us/08480382
i Sequence 2, Septication Us/08480382
i Patent No. Septication Septication
i MPLICANT: Barr, Philip J.
i APPLICANT: Barr, Philip J.
i APPLICANT: Relamble Mandal J.
i APPLICANT: Relamble Mastey, Louise
APPLICANT: Wastey, Methods of Use Thereof
NUMBER OF SEPUENCES: To NUMBER SEPTICE MONERCE APPLICANTON: Expression of Pace in Host Cells and
STREET: Spring House Corporate Center, P.O. Box 457
CITY: Spring House
COUNTRY: O.S.A.
COUNTRY: O.S.A.
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: FORDPY disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-TOS/MS-TOS
SOFTWARE: Patentin Release #1.0, Version #1.25
SOFTWARE: PATENTIN DATA:
APPLICATION MATHER: US/08/480,382
FILINC DATE: ..07 JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
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APPLICATION WIMBER: US 07/621,457
FILING DATE: 30-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: Bak Mary E.
REGISTRATION NUMBER: 31,215
REPERMER/CONCET NUMBER: G15181A
TELECOMMULATION INFORMATION:
TELEBRONE: 215-540-9206
TELEBRONE: 215-540-9306
TELEBRONE: 215-540-9306
TELERANTION FOR SEG 1D NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION DATA:
LICATION NUMBER: US 07/620,859
ING DATE: 29-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-745-880-4
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16,579

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Owery Watch
10.1; Score 78.5; DB 2; Length 794;
Best Local Similarity 25.3%, Pred. No. 9.7;
Matches 39; Conservative 18; Mismatches 46; Indels 51; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54 PQVVCNY----RDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCR-RSTTDCGGPKDH- 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTWTRVLQGVLPAL- 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GEREAL INFORMATION:

APPLICANT: van de Ven, Willen Jan Marie;
APPLICANT: van de Newland, Anne Marie Milhelmina;
APPLICANT: van den Ouweland, Anne Marie Milhelmina;
APPLICANT: Roborek, Antonius Johannes Maria; and
APPLICANT: Roborek, Antonius Johannes Maria; and
TITLE OF INVENTION: Plet Nico Maria
TITLE OF INVENTION: Endoproteolytic Activity; A Process for
TITLE OF INVENTION: Endoproteolytic Activity; A Process for
TITLE OF INVENTION: Endoproteolytically Processing (Frecursor)
TITLE OF INVENTION: Procleins And For The (Micro]Biological
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS: 12
ADDRESSEE: HOFFMANN & BARON, LLP
STREET: 33, Jeticho Turnpike
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
ATOMEY/AGEN INROBATION:
NAME: TIEM, Jessica H.
RECISTRATION NINGER: 40.846
REFERENCE/DOCKET NUMBER: 294-41 DIV II/CON
TELECOMOUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
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STATE: New York
COUNTER: U.S.A.
ILP: 11753
COMPUTER READABLE FORM:
WEDIUM TYPE: FIOPPY disk
COMPUTER: IBM FC COMPATION
SOFTWARE: PACCHAIN RELEASE #1.24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/253,854
FILING DATE: Unassigned
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGULT. 1984-2
1. Sequence 2, Application US/09253854
1. Patent No. 613210.
                                                                                                                                                                                                        TELEPOMUNICATION INFORMATIO
TELEPHONE: (212) 977-9550
TELEFA. (212) 977-9550
TELEFA. (222) 977-9550
TELEFA. (222) 977-9550
INFORMATION FOR SEQ 10 NO: 2: SEQUENCE CHARACTERISTICS:
LENGTH: 794 malno acids
TYPE: malno acids
TYPE: malno acids
TYPE: malno scid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          : (516) 822-3550
(516) 822-3582
                                                     NTTORNEY/AGENT INFORMATION:
NAME: MORAN, Thomas F.
REGISTRATION NUMBER: 16,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-07-849-420-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTWTRVLQGVLPAL- 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: van de von, Willem Jan Marie
APPLICANT: van den Ouveland, Anna Maria Wilheimina
APPLICANT: van den Ouveland, Anna Maria Wilheimina
APPLICANT: van oulfahoven, Ohannes Lambertus Petrus
APPLICANT: Koning, Piet Nico Maria
APPLICANT: Koning, Piet Nico Maria
TITLE OF INVENTION: Piet Nico Maria
TITLE OF INVENTION: Endoproteolytical Composition Having An
TITLE OF INVENTION: Production of Proteins
TITLE OF INVENTION: PROTEINS
TITLE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
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PRIOR APPLICATION DATA:

APPLICATION NUBBER: US 07/620,859
FILING DATE: 29 NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUBBER: US 07/621,443
FILING DATE: 29 NOV-1990
PRIOR APPLICATION NUBBER: US 07/621,457
FILING DATE: 39 NOV-1990
APTOREVE/ACHT INFORMATION:
NAME: BAK, MATY E.
REGISTRATION NUBBER: GISBIA
TELECOMMUNICATION OCC 4:
SEGUERAC TO ACC 4: SEGUERAC TERES TO COLOR 5: SEGUERAC TERES TO COLOR 5: NOLECCULE TYPE: POTOTEIN US-08-480-382-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A ZIP: 10112
COMPUTER READABLE FORM:
WEDIUM TYPE: Floppy disk
COMPUTER: IM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OOTWARE: PATCHENT RELEASE #1.24
CURRENT APPLICATION NATA:
FILING DATE: 19920624
CLASSIFICATION: 4136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 142
US-07-8484-420-2
Sequence 2, Application US/07849420
Parent No. 589856
GENERAL INFORMATION:
APPLICANT: Van de Ven, Willem Ja.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
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40 PTMTRVLQGVLPALPQVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTT 99
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10.14; Score 78.5; DB 4; Length 1274;
Best Local Similarity 11.04; Pred. No. 17;
Matches 31; Conservative 12; Mismatches 38; Indels 19,
                                                                                                 Sequence 2, Application US/09095443
Sequence 2, Application US/09095443
Farent No. 634259
GEREAL INFORMATION:
APPLICANT: Peles Elion
Title OF INVENTION: DIAGNOSIS AND FREATHENT
TITLE OF INVENTION: OF ALP RELATED DISORDERS
NUMBER OF SEQUENCES:
SCREEPONDENCE ADDRESS:
ADDRESSEE: Lyon Lyon
STREET: 831 West Fifth Street
STREET: 631 West Fifth Street
STREET: 631 West Fifth Street
STREET: 631 West Fifth Street
STREET: 5011-5066
COMPUTER: U.S.A.
EDIIOTONIA STORME: U.S.A.
SOUTHARE: LIM COMPALIDE
COMPUTER: EASIEGE OF Windows 2.0
COMPUTER: EASIEGE OF Windows 2.0
CURPERT APPLICATION NUMBER: 60/049,477
FILING DATE: June 12, 1997
ATTORREY/AGENT INFORMATION:
RECEPONDER 12, 1397
REPREMENCE/CONCERT WUMBER: 235/035
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         696 RPMGPQAAPLTIRGP---SSAGQSTPSPHLVPSPAPSPGP 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Plowman, Gregory D.
Culouscou, Jean-Michel
Shoyab, Mohammed
Siegall, Clay B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S-08-484-438-8
Sequence 8, Application US/08484438
Patent No. 5811098
Patent No. 5811098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (213) 489-1600
TELERX: (213) 955-0440
TELEX: (67-3510
TELEX: (7-3510
TYPE: amino acid
STANDEDNESS: single
TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-095-443-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
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SCHEARL INDURANTION

APPLICANT: Van de Ven, Willem Jan Harie

APPLICANT: Van de Ouveland, Anna Haria Wilhelmina

APPLICANT: Van de Ouveland, Anna Haria Wilhelmina

APPLICANT: Van Duljahoven, Johannes Lambertus Petrus

APPLICANT: Koning Piet Nico Waria

APPLICANT: Koning Piet Nico Waria

APPLICANT: Roberoek, Antonius Johannes Maria

ITILE OF INVENTION: PHARAACEUTICAL COMPOSITION HAVING AN ENDOPROTEOLYTIC

ITILE OF INVENTION: PROJUCTION OF PROTEINS

TITLE OF INVENTION: PRODUCTION OF PROTEINS

FILE REFERENCE: SEQUENCE: ISSUENCE: ISS
                                                                                                                                                                                                                                                                                                                                                   Query Match 10.1%; Score 78.5; DB 4; Length 794;
Best Local Similarity 25.1%; Pred No. 9.7;
Best Local Si, Conservative 18; Mismatches 46; Indels 51; Gaps 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               575 PEGLPVPPESSGCKTLTSS-----QACVVCEEGFSLHQKSCVQHCP-------PGFA 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        620 PQVLDTHYSTENDV--ETIRASVC------APCHASCATCQGPALTDCLSCPSHA 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54 POVVCNY----RDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCR-RSTTDCGGPKDH- 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                575 PEGLPVPPESSGCKTLTSS-----QACVVCEGFSLHQKSCVQHCP-------PGFA 619
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 PSKEPLRPR---CRPINATLAVEKEGCPVC---ITVNTTICAGYCPTMTRVLQGVLPAL- 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PSKEPLRPR----CRPINATLAVEREGCPVC---ITVNTTICAGYCPTWTRVLQGVLPAL- 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          667 SLDPVEQTCS----RQSQSSRESPPQ-QQPPRLP 695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       108 ---PL--TCDDPRFQDSSSSKAPPPSLPSPSRLP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          108 ---PL--TCDDPRFQDSSSKAPPPSLPSPSRLP 136
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 144
US-08-955-424-2
; Sequence 2, Application US/08955424
; Patent No. 6274365
; GENERAL INFORMATION:
INFORMATION FOR SEG ID NO: 2: SEQUENCE CHARACTERISTICS: SEQUENCE CHARACTERISTICS: TYPE: anino acid STRANGTHES STRANGTHES SIGGLE TOPE TO STRANGTHE TYPE: DIOCEGIN US-09-25-84-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-955-424-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
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38; Indels 19;

METHODS OF USING SAME

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1534 PTAKAPTCGLCEVARLRONADOCCPEYECVCDPVSCDLPPVPHCERGLQPTLT----- 1586
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 PSKEPLRPRCRPINA-TLAVEKEG------CPVCI----TVNTTICAGYC 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40 PT-----MTRVLQGVLPALPQVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSC 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 7. Application US/08509024B
Patent No. 6391207
CEMERAL INPORMATION
APPLICANT: SPEAR, PALTICIA G.
APPLICANT: SPEAR, PALTICIA G.
APPLICANT: MORTOWERT, REDEBY
FILE REPERENCE: 0390-1
CURRENT APPLICATION WUMBER: US/08/509,024B
NUMBER OF SEQ ID NOS: 7
SOFTMARE: PATENTIN VET: 2.0
SOFTMARE: PATENTIN VET: 2.0
SEQ ID NO 7
SEQ ID NO 7
LENTH: 419
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: LIBS AVOIDED OI LIBS AMELACASA
STATE: New York
COUNTRY: USA
COUNTRY: USA
COMPUTER: PRODABLE FORK:
MEDIUM TYPE: Floppy disk
COMPUTER: TBN PC COMPATIBLE
COMPUTER: TBN PC COMPATIBLE
COMPUTER: TBN PC COMPATIBLE
COMPUTER: TBN PC COMPATIBLE
COMPUTER: TAPLICATION DATA:
APPLICATION NUMBER: US/08/347,594A
ATTORNEY/AGET INFORMATION:
NAME: White, John P. 5845356mber 30, 1994
CLASSIFICATION HOMBER: 28,678
REPERENCE/DOCKET NUMBER: 28,678
REPERENCE/DOCKET NUMBER: 35537-B2
TELECOMMUNICATION HOMBER: 35537-B2
                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: John P. White
STREET: 1185 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION POR SEQ ID NO: 2: SEQUENCE CHARACTERISICS: EDUCTH: 2050 amino acid Type: amino acid Type: amino acid Type: Inneat Type: protein US-08-347-594A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Homo saplens
US-08-509-024-7
         FITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 148
US-08-509-024-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLICART: Garfinkel, Leonard
PEDLICART: Richter, Tamar
TITLE OF INVENTION: CLONING AND PRODUCTION OF HUMAN VON
TITLE OF INVENTION: WILLEBRAND PACTOR GPID BINDING DOMAIN POLYPEPTIDES AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         511 CHOLCARRALLGSGPTQCVNCSQFLRGQECYEECRVLQGLPREYVNARHCLPCHPECQPQ 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 9.7%; Score 75.5; DB 2; Length 1255; Best Local Similarity 26.3%; Pred. No. 31; Mismatches 47; Indels 47; Gaps Matches 18; Conservative 13; Mismatches 47; Indels 47; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      571 NGSVTCFGPEADQCVACAHYKDPPFCVAR---CPSGVKPDLSYMPIWKFPDEEGACQPCP 627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10 CRPINATLAVEKEGCPVCITVNTICAGYCPTMTRVLQGV....-LPALPQ.... 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         56 ------SCQ-ONYRDVRFESIRLPGCPRGVNPVVSYAVAL-----SCQ-CA 92
APPLICANT: Hellstr m, Ingegerd
APPLICANT: Hellstr m, Karl E.
TTLLE OF TWENTION: HERM HUMAN RECEPTOR TYROSINE KINASE
NUMBER OF SEQUENCES: 42
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
                                                                                                                                                         CITY: New York
STATE: New York
COMPREY: U.S.A.

ZIP: 10036-2711
ZIP: 10036-2711
ZIP: RADABLE FORM:
WEDINY TYEE: FLORPY disk
COMPUTER: IN PC COMPATIBLE
SOFFWARE: PACENTIN Release 11.0, Version 11.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/484,438 FILING DATE: 07-JUN-1995 CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93 L-CRRSTTDC---GGPKDH---PLT 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/08347594A Patent No. 5849536 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: unknown; MOLECULE TYPE: protein US-08-484-438-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
STRANDEDNESS: unl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 147
HS-08-347-594A-2
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59 NYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALC....-RRSTTDCGG 103
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

Query Match

3.61, Score 14.5; DB 2; Length 539;

Best Local Similarity 23.1, Pered. No. 15;

Matches 36; Conservative 11, Mismatches 49; Indels 59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION

APPLICANT: ATTELL, CATHETINE L.

APPLICANT: HATTELL, FERGELS H.

APPLICANT: TABLOWITE, RECHAIN

TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH

TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH

TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH

TITLE OF INVENTION: PLACENTAL DERIVED PROSTRATE GROWTH

TITLE OF INVENTION: ADDRESS: 12

CORREST: 1840 De Haviland Drive

CITY: Thousand Oaks

STATE: California

CONFUTER: 1840 De Haviland Drive

CONFUTER: 1840 POR PRIVATE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: 1840 POR COMPATIBLE

COMPUTER: 1840 PO
STATE: California
COUNTRY: 05A
ZIP: 91320-179
COMPUTER READBLE FORM:
COMPUTER: PLOSPY disk
COMPUTER: IN PR COMPALIA
COMPUTER: TWA PC COMPALIA
COMPUTER: PAGENCIE TO RELEASE $1.0, Version $1.30
SOFTANES PAGENCIE TO RELEASE $1.0, Version $1.30
RAPLICATION NUMBER: 05/08/7135,041A
FILING DATE: 22-CCT-1996
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        104 PKDHPLTCDDPRFQDSSSSKAP--PPSLPSPSRLP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      329 ------ KPEMMKSPINITPHVPAEGPEASRPP 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/09190476B Patent No. 6025204 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                         ATORNEY/AGENT INPOBÁRTION:
NAME: MAZZA, RICIDARG J. 657
REGISTRATION NUMBER: Z., 657
REPERBRÉZPORATE NUMBER: A-41
TELECOMENICATION INFORMATION:
TELECOMENICATION INFORMATION:
TELECOMENICATION 1870-8471 (112
TELEFAX: R05, 499, 6731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 539 amino acids TYPE: amino acid STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-735-041A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 151
US-09-190-476B-2
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                                                                                                                                                                                                                                        90 LSKCLQCQHCDPAMGLRASR-----NCSRTENAVCGCSPGHFCIVQDGDHCAACRAYA 142
                                                                                                                                                                                                                                                                                                           99 TDCGGPKDHPLTCDDPRPQDSSSSKAPP-----P 127
                                                                                                                                                                                                                                                                                                                                                                         143 TSSPGQR---VQKGGTESQDTLCQNCPPGTFSPNGTLEECQHQTKCRIHKTVAPSTCSKP 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         143 TSSPGQR---VQKGGTESQDTLCQNCPPGTFSPNGTLEECQHQTKCRIHKTVAPSTCSKP 199
                                                                                         33 PCYAPALPSCK--EDEYPVGSECCPRCSPGYRVKEACGELTGTVCEP-CPPGTYIAHLNG 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Owery Match 9.7%; Score 75; DB 4; Length 419;
Best Local Similarity 21:9%; Pred. No. 10;
Matches 42; Conservative 12; Mismatches 72; Indels 66; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         49 VLPALPOVVCN----YRDVRFESIRLPGCPRGVNPVVSYAVALSC-----OCALCRRST 98
                                   1 PSKEPLRPRCRPINATLAVEKEGCP------VCITVNTTICAGYCPTMTRV--LQG 48
                                                                                                                                                                     49 VLPALPQVVCN----YRDVRFESIRLPGCPRGVNPVVSYAVALSC-----QCALCRRST 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 PSKEPLRPRCRPINATLAVEKEGCP------VCITVNTTICAGYCPTMTRV--LQG 48
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 7, Application US/09333279

Patent No. 630336

GENERAL INPORANTION:
APPLICAMT: SPERA, PALLIJA G.
TITLE OF INVERTION: HERPES VIRUS ENTRY RECEPTOR PROTEIN
FILE REPERENCE: 0290-1

CURRENT PELIAN UNDERS: US/09/333,279

CURRENT FLIAN DATE: 1999-06-15

NUMBER OF SEQ ID NOS: 7

SOFTHARE: PATENTIN VET. 2.0

TENONO 7
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APPLICANT: Martin, Francis H.
APPLICANT: Wattin, Francis H.
TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH
TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH
WORRER OF SEQUENCES. 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Amgen Inc.
STREET: 1840 De Havilland Drive
CITY: Thousand Oaks
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2, Application US/08735041A Patent No. 5914251 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 128 SLPSPSRLPGPS 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             200 TCPPPELLGGPS 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
US-09-333-279-7
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200 TCPPELLGGPS 211
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US-08-735-041A-2
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| PARTICIONE NUMBER: 13.007.135.411
| PARTICIONE NUMBER: 13.007.13
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INFORMATION FOR SEQ ID NO:

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59 NYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALC------RRSTTDCGG 103
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                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 9.6%, Score 74.5; DB 3; Length 539; Best Local Similarity 23.7%, pred. No. 15; Matches 36; Conservative 11; Mismatches 49; Indels 59; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 PSKEPLRPRC--RPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVC 58
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US-09-190-938B-2
US-09-190-938B-2
US-09-190-938B-2
Sequence 2. Application US/09190938B
Fatent No. 6197939
GENERAL INFORMATION:
APPLICANT: Farrell, Catherine L.
HATLIO, Francis H.
Yabkowitz, Rachel
TITLE OF INVENTION: PLACENTAL-DERIVED PROSTRATE GROWTH
FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CONFORTER TO STATE OF CONFORTER PAGE 130

STREET: 1840 De Havilland Drive
CITY: Thousand Oaks
CONFORT: USA
CONFORT: USA
CONFORT: USA
CONFORTER TEADABLE FORM:
K MEDION TYPE: Floopy disk
COMPUTER: ISH PC COMPACTED TO STATE.
COMPUTER: ISH PC COMPACTED TO STATE.
COMPUTER: ISH PC COMPACTED TO STATE.
CONFORTER: PRICE FLOOPY TO STATE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/09/190,938B
FILING DATE: 12-No. 6197939-1998
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDONESS: SINGle
TOPOLOGY: Linear
NOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-190-938B-2
SEQUENCE CHARACTERISTICS:
LENGTH: 539 anino acids
TTPE: anino acids
STRANBEDRESS: single
TOPOLOGY: lines
TOPOLOGY: Lines
GC-08-130-889A-2
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SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY.
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59 NYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALC------RRSTTDCGG 103
                                                                    289 SW----TSLQLGQLPEG------CAECAAAPELAMGALELESRNSTLDPG- 328
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   499 AFPATLSPGRTARLOELCAPDGAPPGVVPVLSAHSPSLGSEYFIRLE-EAAPAAGHDPDC 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 102 GG-PKDHPLTCDDPRFQDSSSKA------PPPSLP------SPS 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   558 AGCAPSPPATADQDDDSDGSTAASLAMEPLLGHGPPVDVPWGRGDHYPRRSLARDPLCPS 617
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9.6%: Score 74.5; DB 4; Length 1384;
Best Local Similarity 25.4%; Pred. No. 44;
41 datches 31; Conservative 10; Mismatches 45; Indels 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CENTRAL INFORMATION OF THE TAPLICANT: JOHN AND A PAPLICANT: JOHN AND A CREGORY TITLE OF INVENTION: KINNER GENES AND USES NUMBER OF SEQUENCES: 53 CORRESPONDENCES: 53 CORRESPONDENCE ADDRESS: ADDRESSER: JUYON & LYON & LYON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 40.3
PRIOR APPLICATION: 40.3
APPLICATION NUMBER: 80.613681ember 22, 1996
FILLING DATE: No.613681ember 22, 1996
ATTORNET/AGENT INFORMATION:
NAME: WATDOMER: A.21014.9 ALGARATION:
REGISTRATION NUMBER: 32,327
REDERBURGE/COCKET NUMBER: 229/182
FELEROHUNICATION INFORMATION:
TELEPHONE: (213) 499-1600
TELEPHONE: (213) 499-1600
TELEPHONE: (213) 499-1600
TELEPHONE: (213) 499-1600
TELEPHONE: (213) 495-1600
                                                                                                                                                                                     104 PKDHPLTCDDPRFQDSSSSKAP--PPSLPSPSRLP 136
                                                                                                                                                                                                                                                    329 ------KPEMMKSPINITPHVPAEGPEASRPP 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 11, Application US/08976255
Patent No. 6136581
GENERAL INFORMATION:
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; MOLECULE TYPE: Protein
US-08-976-255-11
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STRANDEDNESS: S1
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                                                  240 PARTPSSPRCSGHPVNFVLPA-----TMNAWGP--CGTWRPPSTSSRPTSPQATS 288
                                                                                                                                                                               59 NYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALC-----RRSTTDCGG 103
                                                                                                                                                                                                                                                    289 SW----TSLQLGQLPEG------CAECAAAPELAMGALELESRNSTLDPG- 328
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 PSKEPLRPRC--RPINATLAVEKEGCPVCITVNTTICAGYCPTMTRVLQGVLPALPQVVC 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: TELEPHONE NO: (512)499-4462
APPLICANT: TELEPHONE NO: (512)499-4462
TILLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE EXPRESSION OF
TILLE OF INVENTION: A BONE AND PROSTATE DERIVED GROWTH FACTOR
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: P.O. AND MALES DUINES CITY: BULLES OF 4433
STATE: Texas
STATE: Texas
COUNTRY: DNITED STATES OF AMERICA
LIP: 77210
COMPUTER READABLE FORM:
COUPTER: IN THE COMPACTER: TEXA FOR COMPACTER: PARCHILI RELEASE #1.0, Version #1.30
COUPTER: PARCHILI RELEASE #1.0, Version #1.30
FILING DATE: COMPACTER: COMPACTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Y: United States of America CODE: 78701
                                                                                                                                                                                                                                                                                                                                                                     104 PKDHPLTCDDPRFQDSSSSKAP--PPSLPSPSRLP 136
                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION WINBER: US 08/283,701
FILING DATE: 01-AUG-1994
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Arnold, White & Durkee STREET: P.O. Box 4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application PC/TUS9509261
GENERAL INFORMATION:
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NAME: SERTICH, GARY J.
REGISTRATION NUMBER: 34,430
REFERENCE/DOCKET NUMBER: UTF
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : MOLECULE TYPE: protein
PCT-US95-09261-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 154
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SERVALL INTOMATION STEPPHON SERVICE GRAND STATE OF SERVAL INTOMATION STATE OF SERVAL SEEPHON SERVICANT: COPICY, CILVE GTAND SERVICANTON SERVICANTO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 PSKEPLRPRCRPINATLAVEKEGC ------PVCITVNTTICAGYCPTMTRVLQGV-LP 51
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Query Watch

9.5%; Score 73.5; DB 2; Length 84;

Best Local Smilarity 38.3%; Pred. No. 2.3;

Matches 18; Conservative 5; Wismatches 21; Indels

Matches 18; Conservative 5; Wismatches 21; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: DAS CONDELLINE
COMPUTER: THE COMPACINE
C
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US-09-171-945-24
US-09-171-945-24
Sequence 24, Application US/09171945
Patent No. 6277599
GENERAL INFORMATION:
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ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
HWEDIATE SOURCE:
LIBRARY: GenBank
CLONE: 184479
US-09-149-933-5
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                                                                                                                                                                                                                                                                                              APPLICANT: Bandman, Olga
APPLICANT: Bandman, Olga
APPLICANT: Goli, Surya K.
NUMBER OF SEQUENCES: Golfander College Correspondence Andreas
STREE: 131/4 Porter Drive
CITT: Palo Alto
CONTR: Palo Alto
CONTR: Goli Constitution Constitution
STAME: College 
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APPLICANT: Bandman, Olga
APPLICANT: Oll, Surya K.
APPLICANT: WHITY, Lynn K.
APPLICANT: WHITY, Lynn K.
WHITE OF INVENTION: THORR-ASSOCIATED KAZAL INHIBITOR
WHERE OF SEQUENCES: 6
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ADDRESSE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
STATE: 0A
RESULT 156
US-08-744-670-5
Squence 5, Application US/08744670
; Patent No. 5858710
; GENERAL INFORMATION:
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US-09-140-933-
Sequence 5, Application US/09149933
Patent No :5950-
GERERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
TERNOTH: 04 amino acids
TFF: mino acid
T
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INFORMATION FOR SEQ ID NO:
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COMPUTER READABLE FORM:
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203 WAKIGPVGAVVAFAILIAIVCYITQTRRKKNYTESPSFSAGDNPHVLYSPEFRISGA--- 259
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5 PLRPRCRPINATLAVER - EGCPVCITVNTICAGYCPTMTRVL ----- 46
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                                                                                                                                                                                                                                                                                              125 PPPSLPSPSRL 135
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260 -PDKYESEKRL 269
; LENGTH: 318
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                                                                                                                                                                                                                                                                                      ** APPLICANT: Emery, Stephen

** APPLICANT: Copley, Cilve Graham

** APPLICANT: Edge, Michael Derek

** TITLE OF INVENTION: Monoclonal Antibody to CEA, Conjugates Comprising Said

** TITLE OF INVENTION: Antibody, and Their Therapeutic Use in an Adept System

** TITLE OF INVENTION: Antibody, and Their Therapeutic Use in an Adept System

** TITLE OF INVENTION: Antibody, and Their Therapeutic Use in an Adept System

** CURRENT APPLICATION NUMBER: US/09/11/1,945

** PRIOR PLILAND ANTE: 1199-10-24

** PRIOR PLILAND ANTE: 1199-02-14

** PRIOR PLILAND ANTE: 1199-05-04

** PRIOR PLILAND ANTE: 1199-10-24

** PRIOR PLILAND ANTE: 1199-10-24

** NUMBER OF SED ID MOS: 131

** SOFTWARE: PARCHAIN OF 2-1
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                                                    64 SLSSVYTVPSSSLGTQTYTCNVNHKPSNTKVDKRVE-LKTPLGDTTHTCPRCPEP---- 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oubery Match 9.5%; Score 73.5; DB 4; Length 306; Best Local Similarity 28.1%; Pred. NO. 9.9; Matches 50; Conservative 9; Mismatches 62; Indels 57; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        145 PSVFPLAPCSRSTSGGTAA--LGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLY 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              203 SLSSVVTVPSSSLGTQTYTCNVNHKPSNTKVDKRVE-LKTPLGDTTHTCPRCPEP---- 256
                  52 ALPOVV------GCPRGVNPVVSYA 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PSKEPLRPRCRPINATLAVEKEGC ----- PVCITVNTTICAGYCPTMTRVLGGV-LP 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       52 ALPQVV-----GCPRGVNPVSYA 84
                                                                                           85 VALSCQC-ALCRRSTTDCGGPK--DHPLTCDDPRFQDSSSSKAPP--PSLPSPSRLPG 137
                                                                                                                     85 VALSCQC-ALCRRSTTDCGGPK--DHPLTCDDPRFQDSSSSKAPP--PSLPSPSRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : FEATURE: 1: OTHER INFORMATION: Description of Artificial Sequence: humanized 02.09-171-945-95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PATENT NO. 5142798

APPLICANT: SUTCLIFFE, J. GERGOR
TITLE OF INVENTION: SYNTHETIC POLYPEPTIDES CORRESPONDING
TITLE OF INVENTION: SYNTHETIC POLYPEPTIDES CORRESPONDING
FOR PORTIONS OF PROTEINOIDS TRANSLATED FROM BRAIN-SPECIFIC MENAS,
RECEPPORS, METHODS AND DIAGNOSTICS USING THE SAME
NUMBER OF SEQUENCES: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:

**RPELICATION MURBER: US/07/476,961

**FILING DATE: 07-FEB-1990

**PRIOR APPLICATION NUMBER: 58,620

**FLING DATE: 03-JUN-1997

**RPELICATION NUMBER: 516,136

**FLING DATE: 21-JUL-1993

**SEQ ID NO:5:
                                                                                                                                                                                                                               Sequence 95, Application US/09171945
Patent No. 6277599
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Artificial Sequence
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Sequence 18, Application US/08709924

Patent No. 5968513

CEREBAL INFORMATION:
APPLICANT: STAID, ROBER C. APPLICANT: PLANATION:
APPLICANT: Callo, ROBER C. APPLICANT: LUARIGLEANIGH. WARD
TITLE OF INVENTION: NETHOUS OF PROMOTING HEAVTOPOIESIS
TITLE OF INVENTION: USING DERIVATIVES OF HUMAN CHORLONIC GONADOTROPIN UNDERS OVER SEQUENCES. 26
CORRESPONDENCES. 26
CORRESPONDENCES. 26
COUNTRY: New York
STATE: New York
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       555 PSVFPLAPCSRSTSGGTAA--LGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLY 612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 9:5%; Score 73.5; DB 4; Length 716; Best Local Similarity 28.1%; Pred: No. 26; Conservative Watches 50; Conservative 9; Mismatches 62; Indels 57; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    613 SLSSVYTVPSSSLGTQTYTCNVNHKPSNTKVDKRVE-LKTPLGDTTHTCPRCPEP----- 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 PSKEPLRPRCRPINATLAVEKEGC------PVCITVNTTICAGYCPTMTRVLQGV-LP 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               52 ALPOVV------GCPRGVNEYN------BVRFESIRLP-----GCPRGVNPVVSYA 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        85 VALSCQC-ALCRRSTIDCGGPK--DHPLICDDPRFQDSSSSKAPP--PSLPSPSRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Description of Artificial Sequence: humanized US-09-171-945-125
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MEDIUM TYPE: FLOPPY disk
COMPUTER: IRW PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patenterin Ralease #1.0, Version #1.30
SOFTWARE: Patenterin Ralease #1.0, Version #1.30
APPLICATION NUMBER: US/08/709,924
CARTELLIA GROUPS CONTROL CONTR
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N: 514
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NAME: Misrock, S. Leslie
REGISTRATION NUMBER: 16,872
REFERENCE/DOCKET NUMBER: 87
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SQUENCE CHARACTERISTICS
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URRENT FILING DATE: 1998-10-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      THE OF INTENTION: Monoclonal Antibody to CEA, Conjugates Comprising Said
THE OF INVENTION: Antibody, and Their Therapeutic Gae in an Adept System
LE REFERENCE: Monoclonal Antibody to CEA
RERN FALICATION NUMBER: US/09/171, 945
RRENT FILIKU DATE: 1998-10-29
                                                     170 QKDGLTQADKDTLDSLLQQVASVNPKDGTCTLQDCMYKSLQKDWPGYSEGDRQLLKRMLM 229
                                                                                                                                                            230 RK----LCQPQNATIDSSPPREHGRSASPSQKRRIDFIDPLASKKPRISHFTQRAQPILN 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 9.5%; Score 73.5; DB 4; Length 613; Best Local Similarity 28.1%; Pred: No. 2; Red 18.8; Conservative 9; Mismatches 62; Indels 57; Gaps Matches 50; Conservative 7.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             145 PSVFPLAPCSRSTSGGTAA--LGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLY 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            203 SLSSVVTVPSSSLGTQTYTCNVNHKPSNTKVDKRVE-LKTPLGDTTHTCPRCPEP---- 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      52 ALPQVV-----GCPRGVNPVVSYA 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 PSKEPLRPRCRPINATLAVEKEGC ------PVCITVNTTICAGYCPTWTRVLOGV-LP 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         85 VALSCQC-ALCRRSTTDCGGPK--DHPLTCDDPRFQDSSSSKAPP--PSLPSPSRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          257 --KSCDTPPPCPR----CPEPKSCDTPPPC--PRCPEPKSCDTPPPCPRCPAPELLGG 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE: PRORMATION: Description of Artificial Sequence: humanized 05.09:07:171.945-113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MBER: PCT/GB97/01165
1997-04-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1997-02-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APLICATION UNBER: GB9703103.3
APLICATION NUBER: GB9609405.7
APLICATION NUBER: GB9609405.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 162
US-09-171-945-113
Sequence 113, Application US/09171945;
Patent No. 6277599
. CENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 125, Application US/09171945
Patent No. 6277599
                                                                                                                                                                                                                                                                                                          122 SKAPPPS----LPSPSRLPGPSDT 141
                                                                                                                                                                                                                                                                                                                                                                     286 GKLGAPNGHETLLPVPG--PTPSDT 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PPLICANT: Emery, Stephen PPLICANT: Copley, Clive Graham PPLICANT: Edge, Michael Derek
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: GB9
PRIOR FILING DATE: 1997-02-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 131
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: Monoclona
CURRENT APPLICATION NUMBER
CURRENT FILING DATE: 1998
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FILING DATE: 1997-0
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RESULT 167

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CORRESPONDENCE ADDRESS:

ONDESSER:

STREET: 1155 Avenue of the Americas
CITT: New Tork
CONTRI: New Tork
CONTRIS: New Tork
CONTRIST NEW TORK
CONTRIST
CONTR
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TELEX: 6644 PENNIE
INFERMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 14 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ģ
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Factor to No. 599791
Factor to No. 597791
Factor to No. 599791
Factor to No.
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Patent No. 51319504
CERREAL INFORMATION:
APPLICANT: Gallo, Robert C.
APPLICANT: Gallo, Robert C.
APPLICANT: Lunardi Iskandar, Yanto
TITLE OF INVENTION: TREATMENT AND PRETENTION OF HIV INFECTION
TITLE OF INVENTION: BY ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTRON
NUMBER OF SEQUENCES: 26
                                                                                                                                                         Gaps
                                              Ouery Match 9.44; Score 73; DB 2; Length 14; Bonesty Matches 18, Conservation 0; Mismatches 0; Indels Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFALATION INFORMATION:
NAME: MAIOCK, S. Lealte
REGISTRATION UNDERS: 18,872
REPERBACE/DOCKET WINDER: 8769-01
TELECOMONICATION INFORMATION:
TELEFAX: (212) 790-9090
TELEFAX: (212) 869-9741/8864
TELEFAX: (6114 PENNE;
SEQUENCE CHARACTREISTICS:
LENGHATION FOR SEQ. ID NO: 18:
SEQUENCE CHARACTREISTICS:
LENGTH: 14 anino acids
TYPE: Anino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: peptide US-08-709-925-18
                                                                                                                                                                                                                                                RESULT 165
US-08-709-925-18
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JS-08-709-948-18
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55 QVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGP 104

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123 PRNETRVP-CSTVPVTTEVSYAGCTKTVLMNH--CSGSCGTFVMYSAKAQALDHSCSCCK 179
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 PSKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTM-----TRVLQGVLPALP 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 170
PCT-US96-12374-2
Sequence 2, Application PC/TUS9612374
Sequence 2, Application PC/TUS9612374
SEQUENCE 3, APPLICANT: Northwestern University
TITLE OF INVENTION: Herpes Virus Entry Mediator
NUMBER OF SEQUENCES: 5
CORRESPONDER DEPOSITE: 180 N. Stetson, Suite 4700
CITY: Chicogo
STATE: 1111001s
COUNTRY: U.S.A.
219: 60601
                                                                                                                                                               180 EEKTSQREV-----VLSCPNGGSLTHTYTHIESCQC-----QDTVCGLP 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          55 QVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCGGP 104
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                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4. Application PC/TUS9507289
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Rosen, Craig
TILLE OF INVENTION: Colon Specific Genes and Proteins
WUMBER OF SEQUENCES: 24
COMPESSOREE Carella, Byrne, Bain, Gilfillan, Cecchi,
ADDRESSEE Stewart 6 Olstein
STREET: 6 Beneker Farm Road
LIT: Roseland Formation:
COMPUTER READABLE FORM:
HEDIUM TYPE: 10AA
SOFTWARE: 10A COMPUTER SELAMALE FORM:
HEDIUM TYPE: INP COMPUTER STEMALE ONS:
COMPUTER SELAMALE FORM:
HEDIUM TYPE: 10A COMPUTER STEMALE ONS:
COMPUTER SELAMALE FORM:
HEDIUM TYPE: 10A COMPUTER STEMALE ONS:
COMPUTER SELAMA SYSTEM: PC-DOS/MS-DOS
OFFRENT APPLICATION NUMBER: PC-TUS95/07289
FILLEM DATE:
CLASSIFICATION NUMBER: PC-TUS95/07289
FILLEM DATE:
CLASSIFICATION NUMBER: PC-TUS95/07289
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NAME: PETTATO, GREGOTY D.
REGISTRATION NUMBER: 36.134
REPREMCE/COCKEY WIMBER: 32580
TELECOMMUNICATION INFORMATION:
FELEMAN: 201-994-1704
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHRACTERISTICS:
LENGTH: 235 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TOPOLOGY: linear
; MOLECULE TYPE: protein
PCT-US95-07289-4
                                                                                                                                                                                                                                                                                                                        RESULT 169
PCT-US95-07289-4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 9.3%; Score 72; DB 1; Length 235; Best Local Similarity 25.5%; Pred. No. 10; 10. Matches 28; Conservative 11; Hismatches 51; Indels 20; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 9.3%; Score 72; DB 4; Length 235;
Best Locous Isimilarity 25:5%, Pred. No. 10;
Matches 28; Conservative: 11; Hismatches 51; Indels 20; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 PSKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTM-----TRVLQGVLPALP 54
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               55 OVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCOCALCRRSTTDCGGP 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4, Application US/09224110
Patent No. 633195
Patent No. 63196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTATION OF THE STATE OF THE
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-994-1700
TELEFAX: 201-994-1744
TELEFAX: 201-994-1744
INPORANTION FOR SED ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 235 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 4 SEQUENCE CHARACTERISTICS: LENGTH: 235 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                  , MOLECULE TYPE: protein US-08-469-667-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-224-110-4
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US-09-224-110-4
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397 FWHRRPRQACLDTCARC-----CPRPPRARPQPLPDEDP-------PTPSIASLSR 440
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63 VR------VNPVV-- 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10 CRPINATLAVEREGCPVCI-----TVNTTICAGYCPTWTRVLOGVLPALPQVVCNYRD 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Quesry Match 9:34; Score 72; DB 1; Length 452; Best Local Similarity 22:14; Percel. No. 21; Matches 48; Indels 78; Matches 40; Conservative 15; Mismatches 48; Indels 78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | PRIOR APPLICATION DATA: | APPLICATION NUMBER: 03 | ATTORNEY AGENT INFORMATION: | ATTORNEY AGENT INFORMATION: | ATTORNEY AGENT INFORMATION: | AREA | ATTORNEY AGENT INFORMATION: | AREA | ATTORNEY | 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           135 L 135
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Owery Match 9.3%; Score 72; DB 5; Length 283;
Best Local Similarity 24:5%, pred. No. 13;
Matches 38; Conservative 13; Mismatches 68; Indels 36; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 33 PCYAPALPSCR--EDEYPVGSECCPKCSPGYRVKEACGELTGTVCEP-CPPGTYIAHLNG 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 PSKEPLRPRCRPINATLAVEKEGCP-----VCITVNTTICAGYCPTMTRV--LQG 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 49 VLPALPQVVCN----YRDVRFESIRLPGCPRGVNPVVSYAVALSC-----OCALCRRST 98
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APPLICANT: "MANK" Stephen A.
TILE OF INVENTION: CLOURCYSTOKININ RECEPTOR ENCODING DNA
NUMBER OF SEQUENCES: 29
ADDRESSEE: FOLEY & Lardner
ADDRESSEE: FOLEY & Lardner
STREFF: 1800 Disgonal Road, Suite 500
STREFF: 1800 Disgonal Road, Suite 500
STREFF: 1800 Disgonal Road, Suite 500
STATE: 'A
COMPUTER READABLE FORM:

MEDION TYPES: Floppy disk
COMPUTER: INM FC compatible
OPPRATING SYSTEM: PC COMPATIBLE
OFFATING SYSTEM: PC COMPATIBLE
OFFATING SYSTEM: PC COMPATIBLE
OFFATING SYSTEM: PC COMPATIBLE
CURRENT APPLICATION DATA:
FILING DATE: PATCHIN FORMATION:
APPLICATION NUMBER: PCT/US96/12374
CLASSIFICATION NUMBER: PCT/US96/12374
FILING DATE: NUMBER: M3.268
REGISTRATION NUMBER: M3.268
REGISTRATION NUMBER: M3.268
RECISTRATION NUMBER: M3.269
RELEPHONE: M3.266
RELEPHONE: M3.2
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COUNTRY: USA
COMPUTER: REALBALE FORM:
MEDIJUM TYEE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NATA:
APPLICATION NUMBER: US/O7/937,609
FILLING DATE: 19920902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99 TOCGGPKDHPLTCDDPRFQDSSSSKAPPPSLPSPS 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  143 TSSPGOR---VOKGGTESODTLCQNCPPGTF-SPN 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUBER: US 07/831,248
FILLIN DATE: 07-FEB-1992
PRIOR APPLICATION NATA:
APPLICATION NUMBER: US 07/861,769
PILLING DATE: 01-APR-1992
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Patent No. 5319073
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear

MOLECULE TYPE: protein
PCT-US96-12374-2
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US-07-937-609-16
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APPLICAMY: MERCALOGY, Gennady et al TITLE OF UNDWARDLOGY, Gennady et al TITLE OF UNDWARDLOGY, Gennady et al TITLE OF UNDWARDLOGY, ENCODING HUMAN PROTEASE PROTEINS, AND TITLE OF UNDWARDLOGY HUGGECLES ENCODING HUMAN PROTEASE PROTEINS, AND FILE REPERENCE: CLOOLITYONY USES THEREOF CHRENT FILE DO NOT SET THE NET APPLICATION NUMBER: US/09/920,048
CURRENT FILLS OF DATE 2001-09-07
PRIOR FILLEND DATE: 2001-09-07
RING APPLICATION NUMBER: 09/9313,819
NUMBER: OF SEQ ID NOS: 4
SEQ ID NOS: 4
SEQ ID NOS: 4
LENGTH: 855
LENGTH: 855
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 9.3%; Score 72; DB 4; Length 855; Best Local Similarity 28.1%; Pred. No. 44; Matches 27; Conservative 3; Mismatches 36; Indels 30; Caps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 175
US-00-127-362-3
US-00-127-362-3
US-00-127-362-3
Sequence 1.3 Application US/08327362
Patent No. 58112408:
MAPLICAMT: William D. Odell, Jeanine T. Griffin, Sanjeev APPLICAMT: William D. Odello, Deficion Intention of Christian Intention of Intentio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        113 -DPRFQDSSSSKAPPPSLPSPS------RLPGP 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 174
US-09-30-048-2
US-09-300-048-2
Sequence 2, Application US/09920048
; Patent No. 6144352
; GENERAL INFORMATION:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILLING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Alan J. Howarth
REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: PRT
; ORGANISM: Human
US-09-920-048-2
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Sequence 2, Application US/09813819
Regenence 2, Application US/09813819
Regenence 2, Application US/09813819
Regenence 3, Application US/09813819
Research No. 6294368
RESEAL HISTOREMATION:
TITLE OF INVERTION: NUCLEIC ACID MOLECULES ENCODING HUMAN PROTEASE PROTEINS, AND TITLE OF INVERTION: NUCLEIC ACID MOLECULES ENCODING HUMAN PROTEASE PROTEINS, AND PILE REPRENCE: CLOOL177
CURRENT APPLICATION NUMBER: US/09/813,819
CURRENT APPLICATION NUMBER: 2001-03-22
NUMBER OF SEQ 10 NOS: 4
SOFTHARE, RESEARCH OF WINDOWS VERSION 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      284 CRPVISVAGEDSDGCCVQLPRSRLEMITLITPIPGPVP-----GPRPNQAKLLAKKRV 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                337 VRMLLVIVLLFFLCWLPVXSVNTWRAFDGPGAQRALSGAPISFIHLLSYVSACVNPLVYC 396
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          397 FMHRRFRQACLDTCARC-----CPRPPRARPQPLPDEDP-------PTPSIASLSR 440
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        58 CNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDCG----GPKDHPLTCD- 112
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FILING DATE: 01-APR-1992
PRIOR APPLICATION DATE:
APPLICATION DATE: 05-EB-1992
FILING DATE: 07-EB-1992
APLICATION NUMBER: US 07/831,248
TATORNEY AGENT INFORMATION:
NAME: BENT, Stephen A.
RESISTRATION NUMBER: 29,768
REFERENCE/DOCENT NUMBER: 40399/166 NIHD
TELECOMMUNICATION INFORMATION:
TELECARING TO 103 856-3300
TELECARING TO 103 856-3300
TELECARING TO 103 856-3300
TELECARING TO 105: SEQUENCE: 899148 830 15 NO: 16: SEQUENCE: CHARACTERISTICS:
SEQUENCE: CHARACTERISTICS: TERMING ACIDS
TO 105: SEQUENCE: CHARACTERISTICS: TERMING ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  113 -DPRFQDSSSSKAPPPSLPSPS-----RLPGP 138
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; MOLECULE TYPE: protein
US-08-029-170-16
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; TYPE: PRT
; ORGANISM: Human
US-09-813-819-2
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RESULT 178
US-08-709-924-12
Sequence 12. Application US/08709924
Sequence 12. Application US/08709924
Sequence 12. Application US/08709924
Sequence 12. Application Gallo, Robert C.
APPLICANT: Gallo, Robert C.
APPLICANT: Unardi-Iskandar, Vanto
APPLICANT: Unardi-Iskandar, Vanto
TITLE OF INVENTION: WENGEN WENGEN WINGER OF SEQUENCES: 26
CORRESPONDERED ADDRESS: 26
CORRESPONDERED EAGLORIS GAMONIC GONADOTROPIN
NUMBER OF SEQUENCES: 26
CORRESPONDERED CANTOR CANTOR CONTOR CONT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82 ---SYAVALSCOCALCRRSTTDCGGP---KDHPLTCDDPRFQDSSSSKAPPPSLPSPRL 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             397 MHRRFRQACLDTCARC-----CPRPPRARPQPLPDEDP------PTPSIASLSRL 440
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9.21, Score 71.5, DB 1; Length 451;
Best Local Similarity 21.74, Pered. No. 24,
Marches 39; Conservative 18; Mismatches 46; Indels 77;
COUPTER READBLE FORM:
MEDIUM TYRE: Floppy disk
MEDIUM TYRE: Patentin The Release #1.0, Version #1.30
SOFTWARE: Patentin Release #1.0, Version #1.30
SOFTWARE: MEDIUM NUMBER: US/08/570,157
FLIANG DATE: 11-DEC-1995
CLASSIFCATION: 413-1095
TLANG DATE: 10-DEC-1995
CLASSIFCATION: 413-1095
REFERENCE/MEDIUM THERE: 30,162
REFERENCE/MEDIUM NUMBER: 30,162
REFERENCE/MEDIUM THERE: 30,162
REFERENCE/MEDIUM NUMBER: 30,10001
RELEPRATION NUMBER: 30,162
REFERENCE/MEDIUM NUMBER: 30,10001
RELEPRATION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Misrock, S. Leslie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-570-157-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
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APPLICANT: GGELL, WALLIAM D.
APPLICANT: GGELL, WILLIAM D.
APPLICANT: GGELL, WALLIAM D.
APPLICANT: GENERAL GROVER, Sonjeev
APPLICANT: GENERAL, OMBR.
APPLICANT: GENERAL, OMBR.
APPLICANT: GENERAL, OMBR.
APPLICANT: WOODLIAG T.
TITLE OF INVENTION: Chorionic Gonadotropin. Related Protein Activity
FILE REPERENCE: T199, 100-21
GUNERAL PAPLICATION NUMBER: US (09/327, 362
CURRENT FILING DATE: 1994-10-21
MUMBER: OF SEQ ID NOS: 594
SEQ ID NOS: 594
SEQ ID NOS: 595
SEQ ID NOS: 596
SEQ ID NOS: 59
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 9.2%; Score 71.5; DB 2; Length 78; Best Local Similarity 44.3%; Pred. No. 3.3; Matches 19; Conservative 3; Mismatches 20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match 9.2%; Score 71.5; DB 4; Length 78; Best Local Similarity 44.2%; Pred. No. 3.3; Marches 19; Conservative 3; Mismatches 20; Indels Matches
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APPLICANT: ROPIL Alan S.
APPLICANT: GELINDORN, MARTIN
TITLE OF INVENTION: ASSAW FOR NON-PEPTIDE AGONISTS TO
TITLE OF INVENTION: PEPTIDE HORNONE RECEPTORS
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
STREET: 215 Franklin Street
CITT: Boston
CONTRI: MARTIN GRANDERS CONTRIBERS CONTRIBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60 YRDVRF-ESIRLPGCPRGVNPVVSYAVALSCQCALCRRSTTDC 101
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TELEPHONE: (801)566-6633
TELEPHONE: (801)566-760
STELEPHY (801)566-750
STOURNE CHARACTERISTICS:
TYPE: amino acid acids
TYPE: amino acid acids
TOPEL TYPE: protein
ORIGINAL SOURCE:
GRANISM: Anathomonas maltophilia
STRAIN: ACC 13637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NS-09-188-565-3
15 Sequence 3, Application US/09158565
Fatent No. 613989
1 GENERAL INFORMATION:
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; ORGANISM: Xanthomonas maltophilia
US-09-158-565-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2, Application US/08570157
Patent No. 5750353
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US-08-570-157-2
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APPLICANT: Gallo, Robert C.
APPLICANT: BYSAIL. JOSEPH
APPLICANT: BYSAIL. JOSEPH
APPLICANT: BYSAIL. JOSEPH
APPLICANT: LUDACH-ISKARDAGT, YAUTO
TITLE OF INVENTION: TREATHENT AND PREVENTION OF HIV INFECTION
TITLE OF INVENTION: BY ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC GONADOT
NUMBER OF SEQUENCES: 26
ADMRESSE: Pennis & Edmonds LLP
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 7, Application US/08312870
Fatent No. 5639525
Ratent No. 5639525
GENERAL INFORMATION:
APPLICANT: CATSON, Craig W.
APPLICANT: Esmon, Charles T.
TITLE OF INVENTION: Method for Detecting Antibodies to TITLE OF INVENTION: Thrombomodulin in Patients WINDER OF SEQUENCES: 11
CORRESPONDER ADDRESS: ADDRESSEE: Richards, Wedlock & Andrews STREET: 1201 Elm Street, Suite 4500
CITY: Dallas
STATE: Texas
COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 1135 AVENUE OI LIN AMMELICAS
STATE: New YORK
COUNTRY: USA
CIP: 10036-2711
COMPUTER: TEN PC COMPUTER: TEN PC COMPUTER: TEN PC COMPUTER: DEACH IN Release #1.0, Version #1.30
SUSTRARE: PALENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/709,948
FILING DATE: 09-SEP-1996
CLASSIFICATION: 443
ATTORNEY/AGENT INFORMATION:
NAME: Miscock, 5. Leslie
                                                                                                                                          pplication US/08709948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/889
TELEX: 66141 PENNE
INFORMATION FOR SEQ 1D NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0%;
Matches 14; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2IP: 75270-2197
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . MOLECULE TYP
US-08-709-948-12
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US-08-709-935-12

US-08-709-935-12

Sequence 12. Application US/08709925

Fatent No. 599701.

GENERAL INFORMATION

APPLICANT: Gallo, Robert C.

APPLICANT: Brand Instantant Yanto

TITLE OF INVENTION: TREATHERT AND PREVENTION OF CANCER BY

TITLE OF INVENTION: ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC CONADORROPIN

NUMBER OF SEQUENCES: 26

CORRESPONDENCE ADMINISTRATION OF DERIVATIVES OF HUMAN CHORIONIC CONADORROPIN

STAFE: 1155 Avenue of the Americas

CITY: New York

COUNTR: USA

CONGUTER REDABLE FORM:

HEDIDH TIPE: New York

CONGUTER REDABLE FORM:

HEDIDH TIPE: OF COMPAILE FORM:

CONGUTER REDABLE FORM:

CONGUTER RELAKE: PACHAIL Release #1.0, Version #1.30

CORRENT APPLICATION UNDER:

SOUTHARE: PACHAIL RELEASE #1.0, Version #1.30

CURSEITATION STREET INFORMATION:

APPLICATION WHORE:

ATTORNEY ARGERT INFORMATION:

ATTORNEY APPLICATION WHOSE

CLASSIFCATION: $122

ATTORNEY ARGERT INFORMATION:

ATTORNEY ARGERT INFORMATION:

ATTORNEY AGERT INFORMATION:

ATTORNEY ARGERT INFORMATION:

ATTORNEY ARGERT INFORMATION:

ATTORNEY ARGERT AND PRESSORES AND PRESSOR
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| REGISTRATION NUMBER: 18,872 | REPERENCE/OCKET NUMBER: 8769-018 | TELECOMMUNICATION INFORMATION: TELEPRENCE/COCKET 120,700-9990 | TELEPRENCE: (212) 869-9990 | TELEPRENCE: (212) 869-9990 | TELEPRENCE: (212) 869-9990 | TELEPRENCE: (212) 869-9910 | SEQUENCE: CHARACTERISTICS: LENGTH: 14 amino acids | TYPE: maino acids | TYPE: peptide | SCOB-709-924-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 9.1%; Score 71;
Best Local Similarity 100.0%; Pred. No.
Matches 14; Conservative 0; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 66141 PENNIE
INPORATION POR SEQ 1D NO: 12:
SEQUENCE CHANACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: peptide US-08-709-925-12
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APPLICANT: ANGLEGAO, METLIYO A.
APPLICANT: ANGLEGAO, METLIYO A.
APPLICANT: ANGLEGAO, ANGLE H.
APPLICANT: ALGARGO, ANGLE H.
APPLICANT: GLARK, ACHIGANE E.
TITLE OF INVENTION: PROTEINASE INHIBITOR, PRECURSOR THEREOF AND GENETIC
TITLE OF INVENTION: PROTEINASE INHIBITOR, PRECURSOR THEREOF AND GENETIC
TITLE OF INVENTION: SEQUENCES ENCODING SAME
CURRENT APPLICANTON WUMBER: US/09/431,500A
PRIOR REPLICANTON WUMBER: 08/439.11.01
PRIOR FILLING DATE: 1959-19-01
WUMBER OF SED ID NOS: 16

SOFFWARE: PALENTIN VET. 2.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 EPLRPRCRPINATLAVEKEGCP-----VCITVNTTICAG-----YCPTMTRVLQG 48
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 9.18; Score 71; DB 3; Length 368; Best Local Similarity 2.04; Pered. No. 21; Matches 33; Conservative 13; Mismatches 52; Indels 52; Matches 34; Conservative 13; Mismatches 52; Indels 52; Conservative 13; Mismatches 54; Matches 55; Mat
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US-09-431-500A-3
Sequence 3, Application US/09431500A
Spatent No. 6251821
CRNERAL INFORMATION:
                                                                                 REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATIO
TELEPHONE: (516) 742-434
TELERA: (516) 742-436
TELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 368 mainto acidd
TYPE: aminto acidd
TYPE: ADDOLOGY: linear
MOLECULE TYPE: protein
US-08-454-295-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
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APPLICANT: Anderson, Marilyn A.
APPLICANT: Heath, Magela H.
APPLICANT: Clarke, Adrienne B.
TITLE OF INVENTION: PROTEINER E.
APPLICANT: Clarke, Adrienne B.
TITLE OF INVENTION: PROTEINER E.
ADDRESSES: 14
A.
ADDRESSES: Scully, Scott, Murphy, & Presser
CORRESSONDERNE ADDRESS:
ADDRESSES: ADDRESSES: Adden City Plaza
CORRESSONDERNE ADDRESS:
ADDRESSES: ADDRESSES: COUNTY: Now YORK
COUNTRIE: Now YORK
COUNTRIE: Now YORK
COUNTRIE: Now YORK
COUNTRIE: Now YORK
CONFORTER: The PCO Compatible
COMPUTER: IMP PC Compatible
COMPUTER: IMP PC Compatible
COMPUTER: The PCO COMPASSION:
COMPUTER: The PCO COMPASSION:
CONFORTER: The PCO Compatible
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
CONFORTER TO THE PCOSANG-DOS
CONFORTER: THE PCO COMPASSION:
CONFORTER: THE PCO COMPASSION:
CONFORTER: THE PCO COMPASSION:
CONFORTER: THE PCO COMPASSION:
CONFORTER: THE PCOSANG-DOS
CONFORTER
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Best Local Similarity 20:3%, Pred. No. 15;
Matches 7; Conservative 16; Mismatches 47; Indels 82; Gaps 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    208 GGFCSGVCHNLPGTFECICGPDSALARHIGTDCDSGKVDGGDSGSGEPPPSPTPGSTLTP 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        162 HRCQMFCNQ-----TACPADCDP----NTQASCECPEGYILDDGFICTDIDECEN 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92 -----ALCRR--STIDGGGPKDHPLT------CDDPRFQDSSSSKAPPPSLPSP-SRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 BPLRP-----RCRPINATLAVEREGCPYCITVNTTICA-GYCPTMTRVLOGVLPALP 54
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTRARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/312,870
FILING DATE: US/08/312,870
FILING DATE: US/08/312,870
ATTOMNEY/ARET INFORMATION:
NAME: MANAGEN THORDAMATION:
TELEPHONE: 114-939-4500
INFORMATION FOR EQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LEMETHE AND TO THE ADDRAMINES ON THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3, Application US/08454295
Patent No. 6031087
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Digiglio, Frank S. REGISTRATION NUMBER: 31,346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: amino acid
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-312-870-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     138 PS 139
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US-08-454-295-3
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Ouery Match 9.1; Score 71; DB 2; Length 498;
Best Local Similarity 20.3%; Pred: No. 30;
Matches 37; Conservative 16; Mismatches 47; Indels 82; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      384 HRCQMFCNQ-----TACPADCDP----NTQASCECPEGYILDDGFICTDIDECEN 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92 -----ALCRR--STIDCGGPKDHPLT-----CDDPRFQDSSSSKAPPPSLPSP-SRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 9.1%; Score 71; DB 6; Length 572;
Best Local Similarity 20.3%; Pred. No. 35;
Matches 37; Conservative 16; Mismatches 47; Indels 82; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361 EPVDPCFRANCEYQCQPLNQTSYL-----CVCAEGFAP-----IPHEP 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 EPLRP------RCRPINATLAVEKEGCPVCITVNTTICA-GYCPTMTRVLQGVLPALP 54
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NUMBER OF SEQUENCES: 48
CURRENT APPLICATION DAYS
APPLICATION NUMBER: 08/07/506,325
FILING DATE: 09-APR-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PALLICANT: GLASER, CHARLES B.; MORSER, MICHAEL J.; LIGHT, ; AAPLICANT: GLASER, CHARLES B.; MORSER, MICHAEL J.; LIGHT,
                                   STATE: Virginia

COUNTRY: 1050

ILP: 2004-0747

CONDUTER: LEN PRODE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEN PC COMPATALIALE
OWNOFTER: LEN PC COMPATALIALE
OPPERATING SYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/OB/N33,564
FILIAND DATE: 18 OCTOBER 1996
CLASSIFICATION: 514
ATTORIEVALYORY 114
ATTORIEVALYORY THEORAMIA
                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: SVENSSON, LEGGARD R.
REGISTATION UNBERE: 30,330
REFERENCE/DOCKET NUMBER: 30,136
REPERBOCK/DOCKET NUMBER: 0216-0362P
TELED-MOUNTCATION INFORMATION:
TELEPHONE: (703) 205-8000
TELEFANK: (703) 205-8000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPAN: (703) 205-8000
TELEX: (703) 205-8050
TELEX: (703) 205-8050
TELEX: 488445
SEQUENCE CHARACTERISTICS:
LENGTH: 498 EALIO ECIDS
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : STRANDEDNESS: SINGle
: TOPOLOGY: Linear
: MOLECULE TYPE: Protein
US-08-733-564-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; SEQ ID NO:7:

, LENGTH: 572

5256770-7
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Sequence 3, Application US/08312870

PRICART NOTIONAMION

APPLICANT: Carson, Craig W. APPLICANT: Carson, Craig W. APPLICANT: Esmon, Charles TITLE OF INVENTION: Method for Detecting Antibodies to SUGRESPONDERS ADDRESSE: AD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Owery Match 9.1%; Score 71; DB 1; Length 497; Best Local Shillarity 20.3%; Pred. No. 30; Matches 47; Indels Matches 97; Conservative 16; Mismatches 47; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: FUJIWARA, Kenji
MAPLICANT: MOGHIDA, Satoshi
TITLE OF INVENTION: METHOD FOR TREATING LIVER INJURY
NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSE: Birch, Stewart, Kolasch & Birch, LLP
STREET: P.O. Box 747
CITY: Falls Church
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/08733564
Patent No. 5916874
GENERAL INFORMATION:
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US-08-733-564-2
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364 EPVDPCFRANCEYQCQPLNQTSYL------CVCAEGFAP-----IPHEP 401
                                                                                                                                                      402 HRCQMFCNQ-----TACPADCDP----NTQASCECPEGYILDDGFICTDIDECEN 447
                                                                                                                                                                                                                                              92 -----ALCRR--STTDCGGFKDHPLT------CDDPRFQDSSSSKAPPPSLPSP-SRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 9.1%; Score 71; DB 1; Length 575; Best Local Similarity 20.3%; Pred. No. 35; Matches 37; Conservative 16; Mismatches 47; Indels 82; Gaps
                                                                                        55 ---QVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQC------91
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APPLICANT: ESROW, CRAIG W.
APPLICANT: ESROW, CARLSON
TITLE OF INVERTION: Matched for Detecting Antibodies to
TITLE OF INVERTION: Matched for Detecting Antibodies to
TITLE OF INVERTION: Thrombomodulin in Patients
WINNER OF SEQUENCES: 11
CORRESPONDERC DADRESS:
ADDRESSEE: Richards, Wedlock & Andrews
STREE: 1201 Elm Street, Suite 4500
CITTY: Dallas
STATE: 1202 Elm Street, Suite 4500
CITY: Dallas
STATE: 1202 Elm Street, Suite 4500
CITY: Dallas
STATE: 1202 Elm Street, Suite 4500
CONTRY: USS
CONTRY: EN STATE FORM:
WRDIOM TYPE: Floppy disk
COMPUTER: STREAM COMPATION
CONTRYES: Floppy disk
CONTRYES: BAR COMPATION BAR
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION NAMBER: US/08/312,870
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ATTONNEY/CAGET INFOMATION:
NAME: Hansen, Eugenia S.
REGISTRATION WINBER: 31,986
REPERRICE/DOCKET WUNBER: ONE
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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FRAGMENT TYPE: N-terminal
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JENGTH: 575 amino acids
IYPE: amino acid
FOPOLOGY: linear
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
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; LOCATION: 19..575
US-08-312-870-1
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399 HRCQMFCNQ-----TACPADCDP----NTQASCECPEGYILDDGFICTDIDECEN 444
                                                                                                                       445 GGFCSGVCHNLPGTFECICGPDSALARHIGTDCDSGKVDGGDSDSGEPPPSPTPGSTLTP 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 9.1%; Score 71; DB 1; Length 575;
Best Local Similarity 20.3%; Pred. No. 35;
Matches 37; Conservative 16; Mismatches 47; Indels 82; Gaps
                                                                             92 ----ALCRR--STIDGGGPKDHPLT-----CDDPREQDSSSSKAPPPSLPSP-SRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 EPLRP-----RCRPINATLAVEKEGCPVCITVNTTICA-GYCPTMTRVLGGVLPALP 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPLICANT: Yamamacu.,
PPLICANT: STAUL, KOJI
PPLICANT: Metsuda, Aklo
ITILE OF INVENTION: A Polypeptide Capable of Interacting
ITILE OF WENTION: With Thrombin

TITLE OF GENTERICES: 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: /label-protein
OS-09-18FR INFORMATION: /note-"human thrombomodulin"
US-08-561-2064-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CONGUER READALE FORM:
MEDIUM TYPE: Floppy disk
COMFUTER: IEM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: Patenerin Release #1.0, Version #1.25
APPLICATION NAMER: US/08/261,206A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DDRESSEE: Birch, Stewart, Kolasch & Birch
RREF: 301 N. Washington St.
TTT: Falls Church
RATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
CLOSASTECATION: 530
CLOSASTECATION: 530
APPLICATION NUMBER: 03 7/740,492
FILING DATE: 03-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/08261206A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zushi, Mitichitaka
Gomi, Komakazu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Svensson, Leonard R. REGISTRATION NUMBER: 30330 REFERENCE/DOCKET WUMBER: TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX.: 24345
INPORATION FOR SED IN 00: 59.
SEQUENCE CHARACTERISTICS:
LENGTH: 575 amino acida
TYPE: amino acida
TYPE: amino acida
TYPE: amino acida
TYPE: protein
FORGULE TYPE: protein
ORIGIAML SOURCE: internal
ORIGIAML SOURCE:
FORGULE TYPE: protein
FORGULE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Protein
LOCATION: 1..575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
SIP: 22046-0747
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US OF 455-475 G

SEQUENCE 6. APPLICATION US/08485449

SECTION SEATON

TRILLE OF INVENTION: BEAUTOPOLITIC GROWTH FACTORS, NUCLEDITIDE

TITLE OF INVENTION: BEAUTOPOLITIC GROWTH FACTORS AND METHODS OF USE

TITLE OF INVENTION: THERROF

TITLE OF INVENTION: THERROF

TITLE OF INVENTION: THERROF

TORRESONDENCE STATE

CORRESONDENCE STATE

COURTESSEE: MORRISON 6. POERSTER

STREET: 755 Page Mill Road

COUNTRY: GBA

COURTER: 120 Allo

STATE: California

COMPUTER: READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: INPR COMPATIBLE
Query Match 9.1%; Score 71; DB 6; Length 575; Best Local Similarity 20.3%; Pred: No. 35; Matches 37; Conservative 16; Mismatches 47; Indels 82; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     448 GGFCSGVCHNLPGTFECICGPDSALARHIGTDCDSGKVDGGDSGEPPPSPTPGSTLTP 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    402 HRCQMFCNQ-----TACPADCDP----NTQASCECPEGYILDDGFICTDIDECEN 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92 -----ALCRR--SITDCGGPKDHPLT-----CDDPRFQDSSSSKAPPPSLPSP-SRLPG 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             55 --- QVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQC-------91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 EPLRP------RCRPINATLAVEKEGCPVCITVNTTICA-GYCPTMTRVLOGVLPALP 54
                                                                                                                                                                                                                                                                                                                                    RESULT 190
$46668 - $46668
$24668 - $46668
$1, APPLICANT: GLASER, CHARLES B.; MORSER, MICHAEL J.; LIGHT, 1947 - $1, TITLE OF INVENTION: SUPERIOR THROMBOMODULIN ANALOGS FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PHARMACEUTICAL UGE ES: 57

WOMBER OF SEQUENCES: 57

CURRENT APPLICATION DATE: 57

CURRENT APPLICATION NOBER: 05/08/155,346

FILING DATE: 22-NOV-193

RETION DATE: 12-NOV-193

RETION DATE: 12-NOV-193

RELICATION UNBER: 568,456

RELICATION UNBER: 568,456

APPLICATION UNBER: 506,335

RILING DATE: 10-8PR 1990

APPLICATION UNBER: 406,941

FILING DATE: 12-NOV-1989

RELICATION UNBER: 345,374
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5466668-6
                                                                                                             138 PS 139
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US-08-485-449-6
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                       364 EPVDPCFRANCEYQCQPLNQTSYL------CVCAEGFAP-----IPHEP 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      402 HRCOMFCNQ-----TACPADCDP----NTQASCECPEGYILDDGFICTDIDECEN 447
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               55 ---QVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQC-----------------91
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                                                                                                                                                                                                                                                                                                                                                                                              RESULT 189
US-08-170-290A-54
IS-08-170-290A-54
Sequence 5.4 Application US/08170290A
FREATH NO. 57020A
FREATH NO. 57020A
FREATH NOTSET. William H.
APPLICANT: Andrews, William H.
APPLICANT: Alorese, William H.
APPLICANT: Alorese, William H.
FITLE OF INVENTION: Compositions
FITLE OF INVENTION: Compositions
FREATH NOTSET: Money H. Healin
FITLE OF INVENTION: Compositions
FREATH STATE: James M. Healin
FREATH STATE: California
CONFRY: USA
FREATH SPANIE FROM:
FREATH APPLICANTON DATA: Release #1.0, Version #1.25
FREATH DATE: PATENT USA
FREATH DATE: PATENT US DATA:
FREATH DATA:
FRE
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FILING DATE: 0.10L-1991
CLASSIFICATION: 435
APPOREYZAGETY INFORMATION:
NAME: Healin, James N. 48
RELISCHMUNICATION INFORMATION:
TELECOHMUNICATION INFORMATION:
SEQUENCE CHARACTERISTICS:
AND OR A
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PULING DARE: 28 bec-1993

CLASSIFICATION: 415

CLASSIFICATION: DARA:

APPLICATION WURDER: PCT/US92/05573

FILING DATE: 01-UL-1992

CLASSIFICATION DATE: 01-UL-1992
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MOLECULE TYPE: protein
US-08-170-290A-54
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APPLICANT: Landes, Gregory M.
APPLICANT: Landes, Gregory M.
APPLICANT: Connors, Timothy D.
APPLICANT: OGNOCASI, WILLIAM R.
APPLICANT: TO ARCAVASI, WILLIAM R.
APPLICANT: WAR MANY TERENCE J.
APPLICANT: KINGER KATHERING WOVEL HUWAN CHROMOSOME 16 GENES,
TITLE OF INVERTION: NOVEL HUWAN CHROMOSOME 16 GENES,
TITLE OF INVERTION: COMPOSITIONS, METHODS OF MAKING AND USING SAME
CORRESPONDENCE ADDRESS:
ADDRESSES: GRAZENE CORPORATION
STREE: TEAMINGHAME CORPORATION
COMPITE: Messachausetts
COMPITE: REAL OF COMPACIBLE FORM:
TITLE OF THE PLOYEY OF COMPACIBLE
COMPITE: TEAMINGHAME FORM:
COMPITE: TEAMINGHAME FORM:
COMPITE: TEAMINGHAME FORM:
COMPITE: TEAMINGHAME FORM:
APPLICATION NUMBER: US 08/665,259
FILING DATE: 17-7UN 1996
FRIJNG APPLICATION NUMBER: US 08/665,259
FILING DATE: 17-7UN 1996
FRILCH DATE: 17-7UN 1996
FRILCH DATE: THORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   320 CRFNNELYRLSGRRSG-----GVCLNCRHTTAGRHCHYCREGFYRDPGRALSDRRACR 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    373 ACDCHPVGAAGKTCNQTTGQCPCKDGVTGLTCNRCAPGFQQSRSPVAPCVKTP----IPG 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9 RC-----RPINATLAVERESCPVCITVNTTICAGYCPTMTRVLGGVLPALPQVVCNYRD 62
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 193
US-08-762-500-21
Sequence 21. Application US/08762500
Partent No. 6030606
CENERAL INFORMATION:
    ATORNEY/AGENT INFORMATION:
NAME: DUGAN, DEBOTAN A.
REGISTRATION NUMBER: 37,3
REPERENCE/OCKET NUMBER:
TELECOMMUNICATION INFORMATIO
TELECOMMUNICATION INFORMATIO
TELEPHONE: (508) 872-8405
INFORMATION FOR SED ID NO: 21
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; MOLECULE TYPE: protein US-08-665-259-21
                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
TOPOLOGY: line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 138 PSD 140
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429 PTE 431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81 ---VSYAVALSCQCALCRRSTTDCG----GPKDHPLTCDDPRFQDSSSSSKAPPPSLPSP- 132
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OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: Patenticli Release #1.0, Version #1.30
CHRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,449
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MEDIUM TYPE: FIOPPY GLAK

COMPUTER: IEM PC compatible

OPERATING SISTEM: PC-DOS/MS-DOS

SOFWMAEE: PALCENTIN Release #1.0, Version #1.30

SOFWMAEE: PALCENTIN DATA:

APPLICATION NUMBER: US/08/665,259

FILING DATE: 11.7UN-1996

CLASSIFICATION: 435
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COUNTRY: United States of America
21P: 01701
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Patent No. 6028173
                                                                                                                                            FILLIAND NOTE:
CLASSIFCATION: OJOUGASO,
FILLIAD DATE:
ATTORNETY CATAIN: S16
ATTORNETY CATAIN: S16
RECISENCE DOCKET NUMBER: 20296
TELECOMMUNICATION INDRAATION:
TELECOMMUNICATION INDRAATION:
TELECOMMUNICATION INDRAATION:
TELECOMMUNICATION INDRAATION:
TELECOMMUNICATION INDRAATION:
TELECOMMUNICATION INDRAATION:
TELECOMMUNICATION: OF S18
SEDUENCE CHARACTERISTICS:
LENGTH: 389 amino acids
TITRE: amino acids
STRANNEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
US-08-485-449-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   133 --- SRLPGPSDT 141
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182 PGSVPSPGPQDT 193
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US-08-665-259-21
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RESULT 195

US-08-709-195-3

Sequence 3, Application US/08709925

SEGERAL INFORMATION: TRANSMITTON TRANSMIDS OF BUDGAT CHORDOTROP TITLE OF INVENTION: TRANSMIDS OF BUDGATS 
                                                                                                                                    Query Match 8.39; Score 65; DB 2; Length 14; Best Local Smilarity 100.0N; Pred. NO. 0.82; Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 8.3%; Score 69; DB 2; Length 14; Best Local Similarity 100.0%; Pred. No. 0.82; Matches 14; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 3, Application US/08709948
; Patent No. 6319504
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
TELEX: 66141 PENNIE
INFORMATION FOR SED ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
TYPE: amino acid
TYPE: amino acid
TYPE: ALECUCA: linear
MOLECULE TYPE: peptide
US-08-709-925-3
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-709-924-3
                                                                                                                                                                                                                                           42 MTRVLQGVLPALPQ 55
                                                                                                                                                                                                                                                                        1 MTRVLOGVLPALPO 14
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US-08-709-948-3
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Best Local Similarity 23.5%; Pred No. 49;
Matches 43; Conservative 9; Mismatches 42; Indels 89; Gaps 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      287 RCKPFYCDRPWQRATARESHACLAC-----SCNGHA-------RR 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63 WRP--ESIRLPGCPRGVNPVVSYAVALSCQ------CALCR-----RSTTD---CG 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   320 CRFNMELYRLSGRRSG------GVCLNCRHNTAGRHCHYCREGFYRDPGRALSDRRACR 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9 RC-----RPINATLAVEKEGCPYCITVNTTICAGYCPTMTRVLQGVLPALPQVVCNYRD 62
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FILING DATE: 09-SEP-1996
CLASSIFICATION: 514
ATORNEL/ACENT INFORMATION:
NAME: Misrock, S. Leslie
RECISTRATION NOMBER: 18/69-018
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                  REFERENCE/DOCKET NUMBER: IL
TELECOMMUNICATION INFORMATION
TELEPHONE: (508) 872-8400
                                                                                                                         TELEFAX: (212) 869-9741/88
TELEX: 66141 PENNIE
FORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 14 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       138 PSD 140
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720 PNYDPLCSLCTCQRRTVICDPVVCP-----PPSCPHPVQAPDQCCPVCPE----K 765
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8.9; Score 69; DB 2; Length 954;
Best Local Similarity 2.04; Peret. No. 96;
Marches 37; Conservative 14; Hismatchies 69; Indels 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 8.9%; Score 69; DB 2; Length 954; Best Local Similarity 22.0%; Pred. No. 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100 D--CGGPKDHPLTCDDP-RFQDSSSSKAPP----PSLPSPSRLPGP 138
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APPLICANT: LaValite, Edward
APPLICANT: Reacie, Lisa
APPLICANT: Reacie, Lisa
APPLICANT: Reacie, Lisa
NUMBER OF SEQUENCES: 7
CORRESPONDENCES: 7
CORRESPONDENCES: 7
CORRESPONDENCES: 7
CORRESPONDENCES: 7
CORRESPONDENCES: 7
CORRESPONDENCES: 7
COUNTRET: 80 CAMBLIGGERAX DILVE
CITT: CAMBLIGGERAX DILVE
COUNTRET: MASSACILSELES
COUNTRET: NAD COMPALISE
CONFURER: TEM PC COMPALISE
MEDIUM TIPE: Floppy disk
CONFURER: TEM PC COMPALISE
CORPERET: BEACHIC TO CORPATION
COMPARET: TEM PC COMPALISE
CONFURER: PACTORIC NECLOSISE
COUNTRET: NAD COMPALISE
CONFURER: APPLICATION NUMBER: US/09/130,032A
FLILNG DATE: AUGUST LINCOMMATION
FRIENDENCESPONDENT INFORMATION:
NAD CLASSIFICATION NUMBER: 32,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 3, Application US/09130032A Patent No. 5986056 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-749-169A-3
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US-09-130-032A-3
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APPLICARY: LUBRATION: TREATHENT AND PREVENTION OF HIV INPECTION
TITLE OF INVENTION: TREATHENT AND PREVENTION OF DERIVATIVES OF HUMAN CHORIONIC GONADOTROG
NOBERS OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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MEDIDH YIVER: REAPPY disk
COMPUTER: IN PC compatible
COMPUTER: IN PC compatible
COMPUTER: IN PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Petentin Release #1.0, Version #1.30
APPLICATION NUMBER: US/08/709,948
FILLIG DARE: PETENTION: 444
ATTORNEY/AGENT INFORMATION:
RELEPONGEN TONDER: 18,872
RERERENCE/CONCET UNMERS: 8769-016
FELEPONGEN (212) 869-9794
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION:
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TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION INFORMATION
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Setent No. 5846770
GENERAL INFORMATION:
MAPLICAMT: MACIE, Lisa
APPLICAMT: MACIE, Lisa
APPLICAMT: LANGUEKES:
NUMBER OF SEQUENCES:
MUMBER OF SEQUENCES:
ADDRESSEN: Genetics Institute, Inc.
STREET: 87 Cambridgepark Drive
CITY: Cambridge
CONTYR: Massachusetts
CONPYR: USA
CONPYR: STREET: Ripay disk
COMPUTER READABLE FORM:
MEDIUM TYPE: IS POPPY disk
COMPUTER: ISA Compatible
COMPUTER: ISA Compatible
COMPUTER: ISA Compatible
COMPUTER: ISA PC COMPATIBLE
COMPATIBLE
COMPUTER: ISA PC COMPATIBLE
COMPUTER: ISA PC COMPATIBLE
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Best Local Similarity 100.0%; Pred. No. 0.82;
Matches 14; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                ADDRESSEE: Pennie & Edmonds LLP
STREET: 1155 Avenue of the Americas
CITY: New York
STARE: New York
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
HOLECULE TYPE: peptide
US-08-709-948-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 197
US-08-749-169A-3
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WESULT 200

WS-08-569-214-3

Sequence 3, Application US/08569214

Fatent No. 6155469

GENERAL INFORMATION:

APPLICANT: MANN. BARBARA J.

APPLICANT: MANN. BARBARA J.

APPLICANT: MANN. BREARA J.

APPLICANT: MANN. BREARA J.

APPLICANT: WANN. BREARA J.

APPLICANTON BREAFTER J.

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          636 PQCKVSNCTEDLVRDGCLIKRCNETSKTTYWENVDCSNTKIEFAKDDKSETNCKQYKSTT 695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           696 CLNGKCVVQAV-GDVSNVGCGY------CSMGTDNIITYHDDCNSRKSQCGNFN 742
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                                                                   99 TDCGGPKDHPLTCDDPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
                                                                                                                             728 GKCIKGSDNSYSCVFEK--DKISSKSDNDICAECSSLICPADT 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99 TDCGGPKDHPLTCDDPRFQDSSSSKAPPPSLPSPSRLPGPSDT 141
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PRIOR APPLICATION DATA
APPLICATION DATA
APPLICATION NUMBER: PCT/0594/06890
FILLING DATE: I)-011194
ATORNEY AGENT INTORNATION:
NAME: MUMBER: 20,959
REFERENCE/CONCERT NUMBER: 20,959
REFERENCE/CONCERT NUMBER: 30,48-0006.21
FELECOMMUNICATION INTORNATION:
TELECOMMUNICATION INTORNATION:
TELEFRAX: (202) 887-150
INTORNATION POR SEQ ID NO: 3:
EMBORIE CHRACTERISTICS:
LEMTH: 1291 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: 3101ear
GS-08-214-3
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Job time: 24 secs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PREIGNATION:
APPLICANT: HANN, BARBARA J.
APPLICANT: HANN, BARBARA J.
APPLICANT: PETRI, WILLIAM A.
APPLICANT: PETRI, WILLIAM A.
APPLICANT: PETRI, WILLIAM A.
TITLE OF INVESTION: SUDUNIT PETRIDES AND REAGANTS SPECIFIC FOR MEMBERS OF THE
WINGER OF SUDUNIT SUDUNIT MULTICENE FAMILY
CONRESPONDENCE ADDRESS:
ADDRESSE: 12 ON SUDUNIT MULTICENE FAMILY
CONRESPONDENCE ADDRESS:
CONTRICT 2000 FEMINISON & POERSTER
CITYET 2000 FEMINISON WILLIAM AVENUE N.M., STE. 5500
CONTRICT 0050
CONTRICT OF STATE COMPACTION OF STATE COMPACTION BRANCH POPPORTS
CONTRICT IN THE STATE COMPACTION OF STATE COMPACTION MARKE: DETAIL MELABURE PROPORTS
CONTRICT IN THE STATE COMPACTION OF STATE COMPACTION MARKE: DETAIL MELABURE PROPORTS
CLASSIF FORTION WOMER: 08/56,214
ATTORNEY CHANGER: 33,949
RECENTAIN WOMER: 33,949
TELECOMOUTICE OF SEPTIMENE STATE COMPACTION OF STATE STATE COMPACTION WOMER: 33,949
TELECOMOUTICE COMPACTION OF STATE STA
                                 7;
                                                                                                                                                                                                                                                                                        766 QDVR----DLPGLPRSRDPGEGCYFDGDRSWRAAGTRWHPVVPPFGLIKCAVCTCKGGTG 821
                                                                                                                                       720 PNYDPLCSLCTCQRRTVICDPVVCP-----PPSCPHPVQAPDQCCPVCPE----K 765
Matches 37; Conservative 14; Mismatches 69; Indels 48; Gaps
                                                                        1 PSKEPLRPRCRPINATLAVEKEGCPVCITVNTTICAGYCPTNTRVLOGVLPALPQVVCNY 60
                                                                                                                                                                                                               Query Match 8.9%; Score 69; DB 4; Length 1276;
Best Local Similarity 20.2%; Pred. No. 1.3e+02;
Matches 33; Conservative 23; Mismatches 63; Indels 44; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            621 POCKVSNCTEDLVRDGCLIRRCNETSKTTYWENVDCSNTKIEFAKDDKSETMCKQYYSTT 680
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                                                                                                                                                                                                                                                                                                                                                                100 D--CGGPKDHPLTCDDP-RFQDSSSSKAPP----PSLPSPSRLPGP 138
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3, Application US/08937236
Patent No. 6187310
GENERAL INFORMATION:
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JS-08-937-236-3
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